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Special Issue - Child Trauma

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Child Trauma

FOREWORD

Child trauma is a serious, widespread problem. Acts of violence, physical or sexual abuse, or other life-threatening situations can result in significant disturbances for children that may affect all facets of their lives. Trauma can interfere with a child's ability to think and learn and disrupt the path of healthy physical, emotional, and intellectual development.

This special edition of the *Juvenile and Family Court Journal* is devoted to examining child trauma as it affects both dependency and delinquency issues that come before the court. The NCJFCJ worked with a distinguished group of authors affiliated with the National Child Traumatic Stress Network to create this special issue. This national network of research and clinical centers was created by Congress in 2001 to improve services to traumatized children and families around the country and to bring scientific research knowledge and evidence-based practices into community settings where children are seen. Many of its 45 centers around the country work daily with court staff and judges to assess children and plan for appropriate care, and NCTSN has offered several workshops at our meetings. I have had the good fortune to work with the Network center serving Northeastern Ohio.

The NCJFCJ will continue to partner with experts from the National Child Traumatic Stress Network to offer training and information to judges on child trauma, its effects on children and families, and best practices for responding to trauma. Our hope is that greater awareness of child trauma will improve decision making in those cases that come before a juvenile or family court judge, as well as improve outcomes for all children and adolescents who experience traumatic events.

Judge James A. Ray
Lucas County Court of Common Pleas
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Past President, National Council of Juvenile and Family Court Judges

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The Impact of Trauma on Child Development

BY FRANK W. PUTNAM

ABSTRACT

A growing body of research links childhood experiences of abuse and neglect with serious life-long problems including depression, suicide, alcoholism and drug abuse, and major medical problems such as heart disease, cancer, and diabetes. Two basic processes, neurodevelopment and psychosocial development, are affected by early abuse and neglect. Scientists have begun to understand the mechanisms through which these adverse experiences alter child development and produce pernicious mental, medical, and social outcomes. These insights have opened opportunities to intervene to prevent maltreatment and to mitigate its effects. Future success depends on the greater dissemination and refinement of these interventions.

The Scope, Costs, and Consequences of Child Abuse and Neglect

Every year approximately 1 million infants, children, and adolescents are officially substantiated as victims of child abuse and neglect in the United States (U.S. Department of Health and Human Services Administration on Children, Youth and Families, 2005). Scientific surveys of the general population indicate, however, that the actual rate of child abuse and neglect is much higher than is reflected in official reports. Indeed, one recent study found that mother-reported cases meeting North Carolina state statute definitions of physical abuse were 40 times higher than official cases for the same period, and sexual abuse cases were 15 times higher (Theodore et al., 2005). Research indicates that many, perhaps most, maltreated children will have substantial problems that will affect their social, emotional, and physical development (Putnam, 2003). As adults, they will experience far greater problems with mental illness, substance abuse, and poor physical health than their non-abused peers. In addition, they will be considerably less likely to complete their education or to be gainfully employed and far more likely to have serious legal problems.

Depression, which is rapidly becoming the second most costly illness in the world (The World Health Report, 2001), is at least 3 to 5 times more common in individuals with histories of child maltreatment (Edwards, Holden, Felitti, & Anda, 2003). Indeed, victims of child abuse are about 12 times more likely to attempt suicide than non-abused individuals (Dube et al., 2001). Physically abused adolescents are 6 to 12 times more likely to have alcohol and drug problems, and sexually abused adolescents are 18 to 21 times more likely to become substance abusers (Dube et al., 2005). According to the National Institute on Drug Abuse, as many as two-thirds of people in drug treatment programs report being abused as children (Engels, Moisan, & Harris, 1994). In an important series of studies conducted by the Centers for Disease Control and Kaiser Permanente in San Diego, histories of adverse childhood experiences, known as ACEs, were strongly associated with the leading causes of death including heart disease, cancer, diabetes, liver disease, and emphysema (Felitti et al., 1998). The more ACEs an individual experienced (e.g., physical abuse, sexual abuse, exposure to domestic violence, and a substance-abusing parent), the greater the individual's risk of having one or more of these medical conditions and the more likely that individual will die at a younger age than someone without these adverse experiences. The medical conditions are not a

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direct result of the abuse but are rather a result of the dysfunctional and addictive behaviors in which many child abuse survivors engage.

The social and educational consequences of maltreatment start early in childhood and often continue for the rest of a person's life. At least half of all child maltreatment victims will experience serious school problems, especially conduct issues. There is increasing evidence that maltreatment and exposure to domestic violence actually lower children's IQs. In one study, IQs decreased approximately 8 points, which is about twice the effect measured for significant exposure to environmental lead (Koenen, Moffitt, Caspi, Taylor, & Purcell, 2003). Aggression, increased sexualization, and other deviant social behaviors commonly seen in maltreatment victims, coupled with traumatic effects on intelligence, attention, and learning, lead to increased school dropout and expulsion rates for maltreated children compared to non-abused children. As adults, they are twice as likely to be unemployed. In addition, they are significantly more likely to be arrested for serious crimes as juveniles and as adults (Holowka, King, Saheb, Pukall, & Brunet, 2003). A history of childhood sexual abuse is highly correlated with an increased number of sexual partners and consequently much higher rates of sexually transmitted diseases, including HIV, and unintended pregnancy. The rate of teen pregnancy among sexually abused girls is approximately 4 times higher than non-abused girls (Kellogg, Hoffman, & Taylor, 1999; Lee & Goerge, 1999; Thornberry, Ireland, & Smith, 2001; Walker, 1999; Weinman, Smith, Geva, & Buzi, 1998). In addition, sexually abused girls are significantly more likely to have another ("rapid-repeat") pregnancy than non-abused girls, which interferes with their ability to parent their children (Flitter, Elhai, & Gold, 2003). When considered in aggregate, the societal costs of child abuse and neglect are staggering.

A study by the National Institute of Justice estimated that sexual abuse cost $125,000 per victim in 1993 dollars. Physical abuse was estimated to cost $77,000 per victim (Miller, Cohen, & Wiersema, 1996). The average cost across all forms of child abuse was estimated at $70,000 per victim for an average annual cost of approximately $70 billion per year in 1993 dollars. Another study by the Edna McConnell Clark Foundation for Prevent Child Abuse America estimated the annual cost of child abuse and neglect to be approximately $94 billion per year or $258 million per day in 2001 dollars (Fromm, 2001). Neither of these studies fully included indirect medical costs, now known to be extremely high for victims of child maltreatment. Indeed, if all of the direct and indirect costs could be determined, it is likely that child maltreatment would become the single most costly public health problem in the United States.

Why and How does Child Maltreatment Cause these Effects?

Our growing awareness of the pernicious effects of child abuse and neglect across a person's lifespan has led scientists to ask why and how these early experiences produce such extraordinary negative impacts. Understanding the mechanisms through which child maltreatment acts on the growing child can help us develop better treatments for victims and better prevention programs to protect children from these experiences. Researchers have approached these questions from a variety of perspectives, examining psychological, social, and biological factors in adults who were victims in childhood and similarly in children and adolescents who were more recent victims. Some studies have followed abused and non-abused children into adulthood and evaluated their children. As a result of these studies, answers are beginning to emerge that will help us reduce the incidence of child maltreatment and provide services to identified victims that should substantially improve their chances to become healthy and productive citizens.

First, it is important to understand that most definitions of child abuse and neglect encompass an enormous variety of experiences and range from single, limited incidents to prolonged experiences with multiple types of injurious, painful, degrading, and exploitative acts. For example, definitions of sexual abuse include intercourse, attempted intercourse, oral-genital contact, fondling of genitals directly or through clothing, exhibitionism or exposing children to adult sexual activity or pornography, and the use of the child for prostitution or pornography. In addition, research indicates that what is nominally the same maltreatment experience may have different effects depending upon the child's age and gender, and the duration of the experience (Putnam,

2003). Individual differences in temperament and intelligence, coupled with the presence or absence of supportive adults or institutions, also contribute to the final outcome. Some children will recover from abusive experiences and have no lasting impairment. However, the generalization can be made that many individuals who were abused and neglected as children will experience serious and lasting consequences that will shape their lives and likely affect the lives of their offspring.

Two fundamental developmental processes appear to be negatively affected by child abuse and neglect: neurodevelopment (the physical and biological growth of the brain, nervous, and endocrine systems) and psychosocial development (personality formation including morals, values, social conduct, capacity for relationships with other individuals, and respect for social institutions and mores). At some level, neurodevelopment and psychosocial development are inextricably linked in that the brain is the source of an individual's psychological and social behavior. But the effects of maltreatment are most easily understood if these two processes are first considered separately.

Neurodevelopment

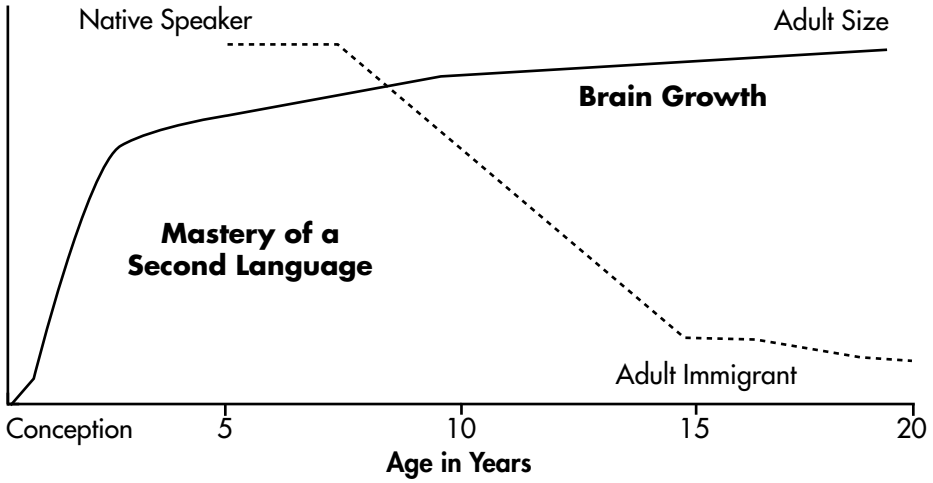
The brain, like the body, is continuously changing in response to time and experience. We are born with over 100 billion neurons, more than we will ever have again. Although a few parts of the brain are capable of making new neurons, in most brain regions growth and development occur through the selective loss or "pruning" of neurons based on their amount of use. Neurons that play important roles and are frequently activated are preserved, while those that are not used or are duplicative of other neurons tend to die. This natural process, known as apoptosis, allows the developing brain many potential developmental pathways which become increasingly determined by life experience. The dramatic growth in the brain's size is instead a result of the formation of connections between neurons and the maturation of those neurons with the growth of axons, dendrites, and the myelination (or insulation) of the axons. By age 3, a child's brain has grown to 90% of its adult size, although the child's body is less than 20% of its adult stature (Shore, 1997).

This "use it or lose it" shaping process gives rise to what scientists refer to as "sensitive" or "critical" periods. A sensitive period is a span of time during brain development when a function or capacity is most easily acquired and after which it is difficult or impossible to achieve normal functioning of that capacity if it has not already occurred. The classic example is the experiment done by Hubel and Wiesel for which they received the Nobel Prize (Hubel & Wiesel, 1970). They sewed the eyes of newborn kittens shut so that they were unable to open their eyes when they normally do (at 5-8 days for short-haired kittens and 10-14 days for long-haired kittens). Long after the kittens would have normally started to see and thus stimulate their developing visual systems, they cut the sutures allowing the kittens to first open their eyes. The kittens were essentially blind as a result of not being able to stimulate their eyes and brain during this sensitive period. The scientists found that it is absolutely critical that kittens' eyes be open and visually stimulated at the usual time if this function of the brain is to develop normally.

We find evidence for sensitive periods for a number of important human capacities. One of the best documented is the relatively short developmental window during which children can learn a second language equally as well as their native language. Figure 1, located on page 4, summarizes these data. The dashed line represents scores on a standardized English test given to immigrants who came to the United States at different ages. At approximately 7 years of age the English proficiency scores begin to fall precipitously leveling out at about age 17 to 20. The solid line represents the brain's size beginning shortly after conception. By about age 7, when the window of opportunity to speak a second language with the same facility as a native-born speaker begins to close, the brain is within 5% to 8% of its final weight. Thus, the developmental window for the ability to speak a second language with the same fluency as one's native language closes at about the time that the brain reaches its adult size. Our brains will continue to make new connections and to modify old ones commensurate with our ability to learn new things, but never again will we have quite the same capacity to fluently acquire a second language.

Research with impoverished preschoolers has shown that early exposure to enriched and stimulating environments results in higher IQ scores (Gottlieb & Blair, 2004). A number of other examples could also

FIGURE 1
Sensitive developmental period for acquiring fluency in a second language compared with the growth of the brain.



be cited, all pointing to the fact that in normal human development there are sensitive periods during which certain experiences are necessary to fully develop an individual's physical, mental, and social capacities. If these experiences do not occur, then the individual loses some of his or her native capacity for this function. Although this does not mean that the individual is totally devoid of that capacity, the individual will perform at a lower level than was potentially possible. In other words, we can all learn to speak Chinese, but as we get older our ability to become fluent will diminish and even diligent study can only partially compensate for this decline.

Effects of Maltreatment on Neurodevelopment

Child maltreatment comes in many forms and, as yet, science has only identified a few of the unique effects of different types of childhood trauma. The neurodevelopmental effects of neglect, however, have been recently highlighted as a result of the tragic cases found in Romanian orphanages. Studies of children who were warehoused in large orphanages with only minimal care and social interactions have found that many of these orphans have significantly smaller brains than normal children of the same age. Not surprisingly, they also have significant developmental delays in language and fine and large motor coordination, high levels of impulsivity, and learning and attention problems (Zeanah & Smyke, 2005).

However, when these children are removed from these neglectful environments and receive healthy stimulation and affection, they generally improve to some degree. The earlier that they are adopted, the greater the expectable improvement, which is also associated with increases in brain size. One study found that unadopted adolescents in institutions at age 16 had a mean IQ of approximately 50, which is classified as moderate to severe mental retardation. Children adopted between ages 2 and 6 had a mean IQ of 80, which is a borderline normal IQ. Children adopted before age 2 had a mean IQ of 100, which is average for the general population (Dennis, 1973). Other studies of adopted orphans and foster children with histories of severe early neglect replicate these findings that the longer the child lives in a neglectful environment, the greater the intellectual and social deficits (Zeanah & Smyke, 2005). The younger the age at which a child is removed from adversity and placed in a nurturing, safe, and stimulating home, the greater the expectable improvement.

Studies of physically and sexually abused children have identified a number of important brain regions that are smaller in size than in age- and gender-matched non-abused children. To date, three studies have found that children with abuse histories have smaller brains than normal children and that these effects are greater in males than in females (De Bellis et al., 1999). These studies also show that the earlier the abuse occurred and the longer the abuse lasted, the greater was the negative effect on brain size (De Bellis & Thomas, 2003). Several specific brain regions appeared to be most affected, including the corpus callosum, a large bundle of nerve fibers that link the left and right hemispheres together. Certain areas of the frontal lobes, which are important in planning and exercising judgment, were also significantly decreased. The decreases in brain size were correlated with increases in post-traumatic and behavioral symptoms. Another important brain region, the anterior cingulate gyrus (which is important in rapid decision making), was found to have lower levels of a particular chemical, N-acetyl-asparate (NAA), which is associated with neuron health. Thus, the neurons in the anterior cingulate region of some maltreated children resemble those seen in late stage alcoholics and adult PTSD cases.

At present, we cannot scientifically prove that the changes in brain size and function seen in abused and neglected children are the cause of their intellectual, social, and behavioral problems, but most authorities believe they are significantly related. The decrease in brain size is likely the result of the neurons' failure to make an appropriate number of connections. We know from animal studies that the differences in brain size seen between animals raised in impoverished environments and those raised in enriched environments is that the former have significantly fewer connections among their neurons. It is also likely that maltreated children have an increased number of inappropriate or dysfunctional connections between their neurons. For example, when abused children are shown a series of computer-manipulated photographs of facial expressions that range from anger to fear, they continue to report seeing anger long after non-abused children identify fear (Pollak, Cicchetti, Hornung, & Reed, 2000). Thus, as a result of their experiences of abuse and neglect, maltreated children perceive the world differently and consequently will react differently to situations than their non-abused peers.

Psychosocial Development

Our scientific understanding of the bonding between a parent and child dates back to the seminal observations of John Bowlby over 50 years ago. He postulated that humans, like other species, are predisposed to seek and sustain relationships that satisfy an intrinsic need for security and perform the important biological function of ensuring the child's protection and survival; he labeled this process attachment (Bretherton, 1992). In the last two decades, attachment research has explored the psychosocial and biological dimensions of attachment, and numerous interventions have been designed to enhance attachment when it seemed impaired. Many other psychosocial processes (e.g., emotional regulation, impulse control, the capacity to develop healthy relationships with others, the consolidation of a stable, positive sense of self, and identification with social norms and values) appear to depend on the development of a healthy attachment relationship during the first year of an infant's life. The failure to develop a secure attachment in infancy appears to reverberate throughout an individual's life in the form of difficulties with relationships and regulation of emotions and impulses.

The attachment bond has three key elements: First, it is an enduring emotional relationship with a specific person; second, the presence of that person provides a sense of safety, comfort, and pleasure; and finally, the loss or threat of loss of that person evokes intense distress (Perry, 2002). The quintessential example of attachment is the mother-child relationship, which can be assessed in the clinic or laboratory using standardized mother-child interactions with children and questionnaires with adolescents and adults. The classic assessment paradigm, known as the Strange Situation, classifies the child's response to being reunited with his or her mother after a period of separation during which a stranger (usually a researcher) is present. Scoring systems classify the child's behavior in response to the mother's return according to secure or insecure and organized or disorganized criteria. These categorizations have proven predictive of later problems and psychopathology. Indeed, in infancy and early childhood, attachment is the single

most important factor that can be measured to predict problems later in life.

Effects of Maltreatment on Psychosocial Development

Disturbances in attachment have been linked to maltreatment for the past 20 years. One particular type of attachment disturbance, known as type D attachment, is highly associated with histories of maltreatment and severe deprivation. Type D attachment, also called disorganized/disoriented attachment, is associated with very negative behavioral outcomes, especially violence and aggression, in maltreated children (Perry, 2001). In one study, for example, 85% of maltreated preschoolers exhibited type D attachment (Carlson, Cicchetti, Barnett, & Braunwald, 1989). Children reared in minimal care institutions and orphanages also show high levels of type D attachment. In one study, 65% of young children in a Greek orphanage showed disorganized attachment, compared with 25% for family-raised orphans (Zeanah & Smyke, 2005). In Romanian orphanages, Zeanah and colleagues found that 78% of young children had disorganized attachments with their caregivers compared with 22% of children in a family-raised comparison group (Zeanah & Smyke, 2005).

Children classified as type D have poorer outcomes across many domains, including lower academic attainment, lower self-esteem, poor peer interactions, unusual or bizarre classroom behaviors, cognitive immaturity, and externalizing behavior problems (Green & Goldwyn, 2002; Lyons-Ruth, Alpern, & Repacholi, 1993). Type D attachment is also predictive of subsequent increased levels of dissociation, a psychological process that often involves tuning out reality (Carlson, 1998; Ogawa, Sroufe, Weinfield, Carson, & Egeland, 1997).

Several features of caretaker behavior have been shown to be associated with type D attachments. Both frightening and frightened behavior by a caretaker have been found to increase disorganized attachment in young children. High levels of parental negativity, criticism, and emotionally disturbed communications have also been implicated (Zeanah & Smyke, 2005). Mothers who score high on a measure of dissociation are also more likely to have infants classified as having disorganized attachments, who are, in turn, more likely to have increased dissociation when they reach late adolescence.

In response to these observations and clinical research on disorganized attachments, a formal psychiatric diagnosis of Reactive Attachment Disorder (RAD) was defined as the child's response to "pathogenic care." Two basic clinical patterns of RAD have been described. In the first, the child shows an emotionally withdrawn/inhibited pattern, in which the child exhibits limited or absent initiation or response to social interactions with caregivers, and a variety of aberrant social behaviors such as inhibited, hypervigilant, or highly ambivalent reactions. In the second, the child shows an indiscriminant social/disinhibited pattern manifested by an indiscriminant manner of seeking comfort, support, and nurturance from any available adult and a lack of normal social reticence with unfamiliar adults including a willingness to "go off" with strangers (Zeanah & Smyke, 2005).

The Interaction of Psychosocial and Neurodevelopmental Maltreatment Effects

Understanding the critical interactions of neurodevelopmental and psychosocial developmental processes is the current scientific frontier for researchers seeking to intervene in the effects of child maltreatment. Perhaps the most developed example is the understanding of the effects of maltreatment on the critical stress response system known as the hypothalamic-pituitary-adrenal axis, commonly referred to as the HPA axis. The HPA axis is a hormonal system that reacts to stress and trauma by secreting the potent hormone cortisol. Research, initially with Vietnam combat veterans with post-traumatic stress disorder (PTSD) and later with other traumatized populations, found that the HPA axis is often seriously dysregulated as a result of prior traumatic experiences. Although there are some differences in the type of dysregulation seen in traumatized children compared with adults, subsequent research with sexually abused and maltreated children replicated these findings (De Bellis & Thomas, 2003).

Experiences of abuse and neglect act to increase levels of cortisol in maltreated children (De Bellis & Thomas, 2003). Increased cortisol levels, which may be lifesaving in an emergency, are nonetheless toxic to neurons in certain regions of the brain. The regions of the brain affected by stress-increased cortisol levels are also among those areas significantly decreased in size in trauma victims. Current theory postulates that the

repeated stress and trauma associated with maltreatment increases levels of circulating cortisol, which, in turn, damages or kills neurons in critical brain regions. The loss of these neurons and their connections contributes to the psychosocial problems with emotional regulation, impulse control, logical thinking, and social behavior seen in maltreated children. Potential treatments are available including commonly prescribed antidepressant medications which act to lower Corticotrophin Releasing Hormone (CRH), which initially stimulates the production of cortisol. Treatment trials are under way in an effort to determine if early intervention can reduce the detrimental biological effects of maltreatment.

For some time, we have known from animal research that stressing the mother leads to increased stress in the infant as manifested by levels of stress hormones such as cortisol. In some instances, the degree of stress manifested by the infant was two or more times that seen in the mother. Now, research is showing similar effects in children. Studies of emotionally exhausted working or depressed mothers have also shown increased levels of cortisol in their young children (Chryssanthopoulou, Turner-Cobb, Lucas, & Jessop, 2005). Thus, the attachment bond between mother and child has an important biological component, such that stresses experienced by the mother affect the child's biological systems in ways that we believe to be detrimental to the long-term health of the child. Maltreated and neglected children are also less able to experience positive interactions with a caretaker. A study led by Seth Pollak at the University of Wisconsin used a computer game to get mothers or caretakers to physically interact with their children by whispering to each other, patting each other on the head, or tickling each other (Wismer Fries, Ziegler, Kurian, Jacoris, & Pollak, 2005). The family-raised children showed increases in two hormones, vasopressin and oxytocin, that are associated with affiliation and strong interpersonal relationships. The orphaned children did not show these normal increases.

Implications of Current Research on the Impact of Maltreatment on Child Development

The first and foremost recommendation that emerges from reviews of the effects of maltreatment on child development is for more and better prevention programs. Successful prevention of child abuse and neglect will do more to eliminate its pernicious effects than any combination of treatments. Indeed, the mainstay of public health efforts is that the prevention of disease is the most cost-effective intervention. Basic public health measures such as clean water and adequate sanitation have eliminated more illness than all of the modern medications and surgical procedures combined. Echoing this view, the Surgeon General of the United States, Richard Carmona, has called for a public health approach to child abuse and neglect as part of 21st century efforts to improve the health and well-being of the American public (Carmona, 2005).

To prevent child abuse and neglect and to ensure optimum psychosocial development, it is critical to help families provide three basic components for their children. The first is adequate nutrition to ensure healthy physical development and resistance to illness. Sadly, many children in the United States either go to bed hungry or subsist primarily on high calorie, low nutrition "junk food" which does not provide the necessary building blocks for optimal brain development. The second factor is a stimulating early environment. During the critical years of 0 to 3, children especially need to be stimulated and challenged to see and think, to explore and solve problems, in order to fully develop the basic mental processes they will rely upon for the rest of their lives. The third component is a healthy, secure, and loving relationship with a primary caregiver. It is the moment-to-moment daily interactions between the child and the primary caregiver that shape the child's ability to manage his/her emotions, control impulses, and develop healthy relationships.

Child Abuse Prevention and Treatment Works!

Policy makers and the general public often do not realize that there are proven child abuse prevention programs that are very effective in reducing rates of maltreatment and in improving family life. This failure to appreciate the success of these programs means that they are not as widely available as they should be. Some of these programs are highly cost effective, saving at least three dollars for every dollar of program cost (Karoly et al., 1998). Perhaps the best documented of these programs is the Nurse-Family Partnership (NFP)

General Recommendations for Judges

- For dependency courts, it is crucial to intervene early on behalf of children (0-7) in ACE-ridden environments; doing so will benefit not only the children but also society by decreasing crime rates, addictions, and a host of other expensive public health problems.
- For custody evaluators and family court magistrates, it is important to assess domestic violence allegations in the context of research that children exposed in early life to battering have lower IQs and a host of psychological and behavioral difficulties.
- For juvenile courts that deal with offenders, it is essential to conduct full trauma histories and make TF-CBT or other evidence-based trauma treatments available to those young offenders who could benefit.
- Support and community leadership by judges and magistrates for large scale prevention programs such as the Nurse-Family Partnership, a home visiting program.
- Judges and magistrates can play an important role in public education about the social costs and consequences of child maltreatment.

developed by David Olds over the past three decades (Olds, 2005). Directed at first-time mothers, NFP nurses make home visits to help new mothers get off to a good start raising their child. Mothers enter the program during pregnancy and are helped to stop smoking and drinking and to get appropriate prenatal care. When the child is born, the nurse visits the mother weekly or as needed until the child is two years old. During these visits, the nurse helps the mother learn to be the best parent that she can be as well as ensures that the child receives appropriate medical and dental care and any additional services that may be necessary.

A series of research studies at three sites (Elmira, New York; Memphis, Tennessee; and Denver, Colorado) have established that mothers enrolled in the NFP program do significantly better than control women who received typical services in their communities. Mothers in the NFP program were less likely to smoke during pregnancy as measured by urine levels of a nicotine metabolite, cotinine. They had 75% fewer pre-term births and a significantly lower rate of pregnancy-induced hypertension. There was an 80% reduction in verified cases of child abuse and neglect compared with the control group and a 56% reduction in accidental injuries. These effects were greatest for low-income women. Mothers in the NFP program also had a greater spacing of their second pregnancy, which gave the mother more time to care for the first child and more time to finish school or work. As a result, mothers in the NFP program were better able to improve their financial situation and, on follow-up, were significantly less likely to be receiving welfare or food stamps than comparison mothers. Children from the Elmira study have now reached late adolescence or early adulthood. Children whose mothers were enrolled in the NFP program had significantly fewer instances of running away, fewer arrests, fewer convictions, fewer lifetime sexual partners, smoked and drank less, and had fewer problems with drugs (Olds, 2005).

Studies of child abuse prevention programs, such as the "good touch-bad touch" sexual abuse prevention programs offered by many schools, have also been shown to be effective. One study found that college students who had been through a school-based sexual abuse prevention program in elementary school were significantly less likely to have been subsequently sexually abused (Gibson & Leitenberg, 2000). Other studies have also found that child abuse prevention programs do work (Davis & Gidycz, 2000; Rispens, Aleman, & Goudena, 1997). Indeed, research shows that child abuse prevention programs are easily twice as effective as drug abuse prevention programs based on comparison of effect sizes (Davis & Gidycz, 2000). Features associated with

the most effective prevention programs include longer durations and providing greater opportunities to practice the skills taught in the program.

In cases where we are unable to prevent child maltreatment, effective treatments are becoming available. Many of these treatments use a well-established psychotherapy model known as Cognitive Behavioral Therapy (CBT). The best established of these treatment models is Trauma-Focused CBT (TF-CBT) (Saywitz, Mannarino, Berliner, & Cohen, 2000). Variations of TF-CBT exist for all age groups and usually focus on the child but also involve non-abusing caregivers for some sessions. These treatments typically last about 12-20 sessions depending on the child's needs and abilities. At present, relatively few child therapists have been trained in TF-CBT, but that is changing. Another well-respected and proven treatment is Parent-Child Interaction Therapy (PCIT), which has been shown to reduce episodes of re-abuse in physically abusive families (Timmer, Urquiza, Zebell, & McGrath, 2005). In PCIT, the therapist coaches the caregiver (often from behind a one-way mirror) in how to interact with the child in a positive way both to join in the child's activities and to set limits or discipline the child if necessary. PCIT appears to greatly improve parent-child attachments. Child-Parent Psychotherapy, a treatment model developed by Alicia Lieberman and colleagues, has been shown to actually increase IQ scores in preschoolers who have been exposed to domestic violence (National Child Traumatic Stress Network, 2004). A number of other treatments are in the process of being validated and will soon become available. However, therapists must be trained in these treatments, and health insurance or Medicaid must cover their costs if they are to make a difference in the lives of the millions of children who have been abused or neglected.

Summary

At the very least, a million children are abused or neglected every year in the United States. The human, social, and fiscal costs are enormous. Two basic child developmental processes appear to be significantly affected by experiences of abuse and neglect. Neurodevelopment is often impaired and is manifested by decreases in brain size and function including lower IQ and poorer performance in school. Psychosocial development is negatively impacted, especially regulation of emotions, control of impulses, and ability to have healthy and happy relationships. Consequently, abuse of drugs and alcohol is much higher in victims of child abuse and they are more likely to have legal problems and social difficulties. Physical and mental health are also negatively affected with increased medical problems, typically related to poor health habits, and much higher rates of depression and suicide. Prevention programs can be highly effective in reducing the incidence of child abuse and neglect. However, until policy makers and the general public demand better services for maltreated children and their families, this tragic legacy will continue across future generations.

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Pathways from Traumatic Child Victimization to Delinquency: Implications for Juvenile and Permanency Court Proceedings and Decisions

BY JULIAN D. FORD, JOHN CHAPMAN, JUDGE MICHAEL MACK, GERALDINE PEARSON

ABSTRACT

Research studies and observations by mental health and judicial professionals suggest that childhood traumatic victimization may contribute to the development of juvenile delinquency. Based on this evidence, we describe a chronological pathway that runs from: (a) early childhood victimization, to (b) escalating dysregulation of emotion and social information processing ("survival coping," which takes the form of depression, anxiety, social isolation, peer rejection, and conflicted relationships), to (c) severe and persistent problems with oppositional-defiance and overt or covert aggression compounded by post-traumatic reactivity and hypervigilance ("victim coping"). A case vignette is provided, and implications for judicial review and decisions are discussed.

Traumatic victimization, which may involve physical abuse, domestic violence, or neglect, occurs all too often in the lives of children (Boney-McCoy & Finkelhor, 1995; Costello, Erklani, Fairbank, & Angold, 2003). Victimized children may suffer major biological alterations and behavioral, psychological, social, educational, and vocational problems (De Bellis, 2001). Moreover, traumatic victimization may be a factor in the development of persistent juvenile delinquency (Dodge, Pettit, Bates, & Valente, 1995). Although not every delinquent youth has been victimized, clinical (Cauffman, Feldman, Waterman, & Steiner, 1998) and epidemiological (Abram et al., 2004) studies indicate that at least three in four youths in the juvenile justice system have been exposed to victimization. Many of these children also are, or have been, involved in the family court system due to maltreatment (Barth, 1996). Therefore, it is important for juvenile and permanency court judges to know how traumatic victimization adversely affects children biologically and psychologically, how it may contribute to delinquency, and what they and other professionals can do to help these youths.

The importance of these matters to the law cannot

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be overstated. Delinquency may have different causes and remedies depending upon the factors affecting youthful offenders and their motives. The delinquent behavior of a youth who is attempting to protect herself or himself from further victimization or who is reacting to reminders of past traumatic experiences may be no less dangerous or problematic than that of a youth who is callously indifferent to the law or the harm inflicted on people. Yet, the sanctions and services that can best modify this behavior may be very different in these two cases. In order to ensure fair application of procedure throughout the juvenile justice system, authorities representing the legal system have a responsibility to society and to youths and their families to base their judgments on a full understanding of the role that trauma and victimization can play in youths' actions and in their reform.

Psychological Trauma and Juvenile Delinquency

Delinquency takes many forms, including defiance of authority, violence, impulsive behavior, drug use or selling, stealing, property damage, status offenses, and probation violation. Three key types of psychological and behavioral problems are involved in delinquency, including problems with: (1) maintaining attention and managing impulsive or hyperactive behavior, (2) pervasive indifference, negativity, or outright hostility toward others, and (3) aggressive violations of social rules, norms, or laws via cruel or criminal behavior (Lahey Waldman, & McBurnett, 1999). Any of these behaviors can put youths in harm's way, directly by eliciting aggression or rejection from other people and indirectly via other related risky behaviors (e.g., substance abuse, unsafe driving, gambling). Over time, delinquency may become a "life-course-persistent" lifestyle of deviance and criminality that involves both causing and experiencing repeated traumas (Moffitt, 1993).

Psychological trauma involves events that confront a person with the reality or immediate possibility of death, serious physical injury, or a physical violation (e.g., rape or incest). During or soon after trauma, the person experiences a biological and psychological shock that leads to intense emotional reactions such as fear, rage, confusion, or agitation, or to becoming mentally and emotionally shut-down. Many events may be psychologically traumatic, but this article will focus on one particular type: victimization. Victimization involves being threatened or harmed intentionally by a caregiver or other trusted person (e.g., sexual, physical, or emotional abuse), witnessing caregivers or significant others being intentionally harmed (e.g., domestic violence), or neglect, separation from, or abandonment by trusted adults or youths. Victimization is widespread among youths: Half of all children or adolescents in the community (Boney-McCoy & Finkelhor, 1995; Costello et al., 2003; Cuffe et al., 1998) and two-thirds in psychiatric or juvenile justice samples (Abram et al., 2004; Ford et al., 2000) have been seriously victimized.

In addition, several studies suggest that traumatic victimization is associated with the behavior problems involved in delinquency (Cauffman et al., 1998; Ford et al., 2000; Lynskey & Fergusson, 1997; Steiner, Garcia, & Matthews, 1997). Ford and colleagues (2000) found that children in psychiatric treatment for severe problems with oppositional behavior were more likely to have been victimized and more impaired socially and emotionally by traumatic stress reactions than children who had problems with anxiety, depression, inattention, or hyperactivity. Traumatic stress reactions occurred for children of both genders, of all ages from childhood to adolescence, across the range of family socioeconomic levels from poor to upper middle income, and in families that had mild as well as severe levels of parent-child conflict. All of the children in the study had experienced many types of trauma that were not the result of abuse or other forms of intentional harm (e.g., accidents, injuries, illnesses, deaths). However, victimization trauma was the one type of trauma that was particularly associated with oppositional behavior.

Traumatic victimization is unlikely to be the sole cause of delinquency. Genetic influences affecting each individual's basic temperament and approach to life are a major factor in problem behaviors associated with delinquency (Jaffee, Caspi, Moffitt, & Taylor, 2004; Lahey et al., 1999) and also contribute to vulnerability to traumatic stress reactions (Koenen et al., 2003). Family problems with mental illness, drug abuse, or severe parent-child conflict also may contribute to delinquency (Lahey et al., 1999) and may lead to victimization (Boney-McCoy & Finkelhor, 1996; Chaffin, Kelleher, & Hollenberg, 1996). Living with severe family problems also may teach children that abuse, neglect, and domestic violence are

normal, acceptable, or even desirable. Such modeling and reinforcement of victimization can lead children to imitate or tolerate victimization in family, peer, and community relationships (Cauffman et al., 1998; Chaffin et al., 1996; Steiner et al., 1997). Delinquency also may place youths at risk for becoming victimized in adolescence and in adulthood (Koenen et al., 2005).

While not assuming that traumatic victimization causes delinquency or that delinquency causes trauma (Dodge, Lochman, Harnish, Bates, & Pettit, 1997), a first practical implication of these research and clinical findings for judges is that no court order for either delinquency or permanency is complete without consideration of the role that traumatic victimization may have played in the young person's development and current life. (See the box on page 16 for a concise summary of the article's practical recommendations for judges.) A trauma history assessment is similar to but also different from a psychological or psychiatric evaluation. The goal is to identify formative experiences and ways of coping that developed as a result of suffering trauma, not to determine mental health diagnoses or issues. Those who do trauma history assessments should have social work or mental health training, specific expertise in evaluating trauma and post-traumatic stress reactions, and access to licensed professionals for consultation as needed. The National Child Traumatic Stress Network website (www.nctsnet.org) provides an overview of several standardized interview protocols and questionnaires that have been developed for conducting a systematic and sensitive trauma history assessment with youths involved in the child protection or juvenile justice systems.

A trauma history assessment may be included in a mental health evaluation, but the purpose is different from that of identifying psychiatric diagnoses. Trauma history assessments inform the court about how a youth has learned to cope self-protectively as a result of being victimized (if this is the case). The goal of a trauma history assessment is to enable judges to make orders that address the youth's needs for safety and give them help in learning ways of dealing with life that are not merely a repetition of how he or she learned to survive being victimized.[1]

How Does Delinquency Develop?

Beginning before birth, different (but overlapping) developmental pathways lead to the three aspects of delinquency noted previously (Girourard et al., 1998; Nagin & Tremblay, 1999; Speltz, McClellan, DeKlyen, & Jones, 1999). Each pathway is determined by the combined influence of genetics, family, school, and community environments, and the child's psychological capacities (Girouard et al., 1998; Jaffee et al., 2004; Lahey et al., 1999; Slutske et al., 1998). Inattentive, impulsive, and defiant youths who experience severe family conflict, social isolation, school failure, and anxiety or mood disorders not surprisingly are most vulnerable to delinquency.

Patterson (1993) has described a "cascade of impairment" that leads first from problems with inattentiveness, impulsiveness, and negativity in early childhood to feeling rejected or demoralized by people's negative or avoidant reactions. Over time, the child may escalate into aggression and defiance, as well as affiliating with peers and engaging in activities that encourage delinquency. Parents, peers, and teachers are likely to feel progressively more frustrated and hopeless, leading to reduced positive social contacts and supervision, and an escalation of "out-of-control" acts. Patterson (1993) identified boys who had, by grade three or four, "failed in two important tasks, peer relations and academic skills" (p. 916). Over the next five years of childhood and early adolescence, these boys often progressed through the following stages of deterioration: (a) anger, withdrawal, and depression; (b) joining "deviant" peer groups; (c) "wandering" with no monitoring by adults and little or no regard for family or school rules or curfews; (d) substance use; (e) truancy; and ultimately, (f) a police record and the beginning of potentially lifelong trouble with the law. By age 13, they were viewed by their families, schools, and communities as incorrigible. They were both "architects" and "victims" of a pathway toward delinquency (Patterson, 1993) that begins with attention problems, impulsivity, and negativity and can escalate into chronic "aggressive delinquency" in adolescence (Moffitt, 1993).

Lahey et al. (1999) concluded that delinquency is the result of a bad fit between a child's inborn tempera-

[1] Resources for judges who want to get trauma history assessments by qualified professionals are available online through the NCTSN at www.nctsnet.org.

Addressing the Impact of Traumatic Victimization on Youths: Practical Recommendations

1. Require a thorough social history assessment of each youth's potential traumatic experiences and their impact on behavior problems regardless of whether a mental health evaluation is ordered.

2. Insist that evaluators consider whether a youth is motivated primarily to protect self or others from being further victimized versus by a desire to callously use, control, and victimize others.

3. Court orders should get youths (and parents) to programs that teach skills for managing emotions (including, but not limited to, anger) and thinking clearly (such as effective problem solving). These are particularly crucial skills for victimized youths, but also are relevant for most youths and families involved in the juvenile justice and child protection and permanency systems.

4. Court-ordered evaluations should address not only the evident behavioral, psychiatric, and learning problems, but also the youth's intellectual, emotional, and social strengths and how these have been adapted to cope with past or ongoing traumatic victimization.

5. Family involvement in rehabilitation and counseling programs is essential not only to bring to bear the positive influence of the family but also to help youths and families deal constructively with feelings of disillusionment and betrayal that are particularly likely to occur after a traumatic event.

6. Youths entering, or on the verge of entering, the juvenile justice system need services that help them manage their emotions and think clearly before they become trapped in delinquency as a result of learning to cope as a victim or victimizer.

7. Ordering services and placements that specifically teach and track emotion regulation and information processing skills can increase competency and address the due process rights of youths whose competency or ability to benefit from services otherwise will be in question.

8. Court orders should consider how to provide girls and boys with safe places to experience and develop the skills necessary to fully participate in healthy nonvictimizing relationships.

ment and his or her parents' temperaments, emotional or psychiatric problems, and behavioral capacities, lifestyle, and parenting styles. Temperamentally negative, uncaring, and avoidant children tend to be difficult to get along with. However, if parents are able to help the child to redirect negativity and avoidance toward more prosocial forms of assertion, and to develop empathy for and interest in others, these temperamental traits need not develop into delinquency. On the other hand, if parents themselves are temperamentally oppositional, uncaring, or avoidant, they may not be able to respond well to their child's temperament. Such parents are likely to role model antisocial, aggressive, addictive, or avoidant ways of dealing with people, responsibilities, and stress. Because of strong genetic influences, temperamentally oppositional, uncaring, and avoidant children are particularly likely to have parents with similar temperaments (Lahey et al., 1999). When this occurs, a child's temperament may bring out "the worst" in the parent, and vice versa, leading to the vicious cycle of harsh, neglectful, hostile, defiant, and aggressive behavior on the part of both the child and the parents (Patterson, 1993).

Traumatic Victimization as a Potential Key Contributing Factor to Delinquency

However, even a temperamentally cooperative and sociable child may become delinquent, and many temperamentally vulnerable children who live with troubled or neglectful parents and associate with delinquent peers do not develop problems with delinquency. What makes the difference? It may be that children who are not genetically or environmentally "destined" to become delinquents but are traumatically victimized can be pushed into delinquency as a way to survive the trauma. Traumatic victimization, as we shall see, teaches children to use often drastic means to cope and survive, which may include delinquency. It also is possible that children who are "set up" inadvertently to become delinquent by their genes and family and community environments may escape this fate if they are not victimized. An unfortunate genetic inheritance or being exposed to antisocial behavior in the family or peer group are severe problems, but they do not necessarily lead to or constitute traumatic victimization.

The second practical implication of our review, therefore, is that judges need to know what makes trauma traumatic and harsh events victimizing, in order to not assume that all delinquent youths are trauma survivors or victims. Children differ in their resilience (Compas, Connor, & Wadsworth, 1997), but what primarily determines whether adverse life experiences are victimizing is not how well the child copes but whether the child has the opportunity to preserve a sense of personal integrity and control in the midst of those experiences. When a child's self-respect and sense of control is stripped away—especially if this is done on purpose by trusted persons—this is traumatic victimization. The result of victimization is a child who is likely to resort to "survival coping" —taking any means necessary to just get by, while feeling damaged, hopeless, distrusting, and empty inside. Survival coping may appear callous and defiant, but it often is a cry for help.

Victimized children first struggle valiantly to survive, and do not inevitably assume the identity of a victim (Chaffin, Wherry, & Dykman, 1997). Over time, survival coping is mentally, emotionally, and physically exhausting. Chronic survival coping can lead even a highly resilient child to feel trapped by what Ford (2002) describes as: "an inescapable 'life sentence'—a kind of prison, torture, or even a living death—rather than a temporary dilemma to be survived until a 'normal' life resumes" (p. 43). The youth comes to define himself or herself as a permanently trapped victim, and to see desperate attempts to ward off danger as necessary no matter the cost.

Paradoxically, it is this ability to persevere with defiance that makes the difference between a traumatized delinquent and a true sociopath. If a judge can distinguish one youth's desperate attempts to redress injustice and regain control from a second youth's callous and hostile use of control to exact revenge or inflict suffering, this distinction points toward rehabilitation from victimization for the first, versus strenuous management of sociopathic criminality for the second.

Emotion Regulation and Information Processing: Paths to Delinquency or Rehabilitation

When exposed to coercion, cruelty, violence, neglect, or rejection, a child may cope by resorting to indifference, defiance of rules and authority, or aggression as self-protective counter-reactions. The child may feel so terrified, alone, and powerless in the face of victimization that the best way she or he can find to cope may take the form of anger, defiance, callousness, or aggression. In these cases, risk taking, breaking rules, fighting back, and hurting peers, authority figures, or vulnerable others (e.g., younger children, animals) reflect a shift from survival coping to victim coping. Such reactive and defensive attempts to overcome or resist helplessness and isolation caused by victimization are motivated by a desire to regain the ability to feel safe and in control. Under ideal circumstances, every youth would have a family and community that assured his or her safety and encouraged the development of a healthy sense of personal control. However, this often is not the case, particularly for youths who grow up in the adverse contexts that we know contribute to delinquency. Where can these children and adolescents turn to find safety and a meaningful sense of personal control in their lives? Often it is to one adult or older youth who shows an interest in and is protective of the boy or girl (Lahey et al., 1999). While the exact ingredients that make this relationship so powerfully positive are still being discovered, we sug-

gest that a key feature of these relationships is that they teach the youth—largely by the example set by the other person—ways to:

1. Regulate emotional states, especially extreme emotions such as terror, rage, confusion, despondency (Cauffman et al., 1998; Patterson, 1993; Weiss, Susser, & Catron, 1998), and
2. Process information by thinking clearly and making choices based on prior learning and likely outcomes (Dodge et al., 1997; Lahey et al., 1999; Pennington & Ozonof, 1996; Weiss et al., 1998).

In contrast, for delinquent youths, emotions may seem unmanageable or absent, and thinking tends to be reactive, rigid, impulsive, and defiant. This in turn leads to distorted views of self, peers, and relationships (e.g., low self-worth, anticipating frustration or harm) and difficulty solving ordinary social problems (Dodge et al., 1997). Ford (2002) concluded that delinquent youths' "impairments in emotion and social information processing … closely parallel the emotional and cognitive dilemmas and deficiencies of children who have suffered traumatic victimization" (p. 39). Each child's experience of victimization is unique, but traumatized youths often experience overwhelming disturbing emotions or virtually no emotion at all (Ford, 2002).

Victimized youths tend to have difficulty with mental concentration and problem solving mainly when faced with hostility (Pollak, Vardi, Bechner, & Curtin, 2005). For a victimized youth, what might seem ordinary and safe to someone else may be riddled with potential threats based upon their past experience of being exploited or harmed in the same or similar circumstances. If such a youth seems preoccupied with inner thoughts, he or she may actually be thinking very actively about how to identify and neutralize dangers that only he or she knows. What may seem to be a deficit in thinking may be a preoccupation with solving survival problems that requires extreme clarity and creativity but which are invisible to people who have not experienced traumatic victimization. What may seem like angry defiance may be self-protective assertions of an unwillingness to be further victimized. What may seem to be very limited ability to engage in prosocial behavior may be an adaptive form of prioritizing in which survival trumps being kind, gentle, cooperative, or courteous.

Thus, in order to survive both physical and emotional danger, rather than developing a flexible, curious, and open-minded style of optimistically engaging in and making sense of life experiences, a victimized youth may adopt "victim coping" as a way of life: a closed, rigid, and pessimistic way of feeling and thinking dominated by generalized distrust, avoidance, and overt or covert resistance (Dodge et al., 1995; Lynskey & Fergusson, 1997; Trickett, 1998). While most survivors of childhood victimization are not abusive as adults, victims may become perpetrators (Widom, 1999). Men who batter their partners, for example, are more likely than nonabusive men to have experienced paternal rejection, physical abuse, and an absence of maternal warmth (Dutton, Starzomski, & Ryan, 1996). These men often describe feeling like victims in current and past relationships, even as they victimize vulnerable others (Dutton et al., 1996).

These findings suggest that court-ordered sanctions and services that address emotional dysregulation and survival- or victim-based information processing can play a vital role in helping children recover from traumatic victimization and also in reducing the likelihood of recidivism and escalating danger to society by youthful offenders. Consistent with the legal concepts of restorative justice (the reintegration of offenders into the community by helping them to recognize and repair the harm they have done; Bazemore, Zaslaw, & Riester, 2005) and zero tolerance (the emphasis upon personal responsibility and societal safety; Ferguson & Williams, 2002; Secker et al., 2004), delinquent youths who experience dysregulated emotions and survival- or victim-based information processing will best be able to become responsible citizens if they are assisted in gaining the capacity to manage their emotions and think clearly.

Case Example

Janelle, a 14-year-old African American female, was placed in juvenile detention after repeatedly running away from home. Physically and sexually abused by her stepfather from age 7 to 11 years old, she became sexually promiscuous, joined a street gang, and regularly stole from and assaulted other girls and adults, including her mother and teachers. Janelle told her probation officer that her stepfather was due to leave prison sometime in the coming year, and she expected her mother

to take him back into the home. To Janelle, this meant that she would have to leave home or kill him because she was not willing to be abused again. She didn't want to hurt him for revenge, but saw no reason to believe he would stop abusing her unless she took drastic action to escape or to eliminate him as a threat. She said, "If he was after me when I was just a girl, he'll really come after me now."

Although Janelle was hypervigilant and guarded about talking, her child welfare worker gradually and sensitively talked with Janelle to get a trauma history over a period of eight months. With careful encouragement and coaching, Janelle was able to share fears about being abused again and the loss and rejection she felt due to her mother's taking sides with her stepfather. Janelle acknowledged that she also needed to control her feelings of rage and aggressive behavior, which she was willing to do now that she believed that her plight and her search for safety were being taken seriously. When she next went before the juvenile court, Janelle said, "I'm not crazy, but when I feel trapped I can start thinking and acting crazy, and I don't want that to happen any more and ruin my life." The judge ordered, and Janelle willingly accepted, a voluntary long-term group home placement in a program specifically designed to help girls recover from abuse and to develop ways of coping that reflected their strengths rather than their ability to break the rules. Janelle continued to battle with low self-esteem, hostility, hopelessness, and thoughts of suicide, but she learned to catch herself in those "dysregulated" states and re-group by doing quiet activities or making positive contact with a peer or adult. As a result, Janelle became a role model for peers and younger girls.

Pathways to Healthy Emotion Regulation and Effective Information Processing

This case study highlights the practical issues that we have discussed and several more that we will now consider. Janelle's social worker was better able to communicate key facts to the judge after she had conducted a sensitive and thorough trauma history. The social worker did not rely solely upon existing records, but also listened to Janelle and drew out her story gradually, showing respect for Janelle's point of view. The social worker considered Janelle's intense rage and harmful actions in light of Janelle's history, and identified a different pattern of behavior and motivation that reflected Janelle's values and determination to protect herself and prevent further harm. Neither the social worker nor the judge accepted or excused Janelle's damaging and threatening statements or actions, but they focused on how she could be helped to better manage her emotions and capitalize upon her unrecognized but noteworthy intelligence, rather than seeking to primarily confine or punish her.

A practical question raised by our focus on traumatic victimization and Janelle's case is: What kinds of programs or services actually help such youths to regulate their emotions and think clearly? Residential and community-based mental health, substance abuse, special education, and vocational and recreational programs may address these goals, but typically not as a primary focus or outcome. Instead, these programs and providers tend to make the assumption that delinquent youths have the capacity to regulate emotions and think clearly but that they simply are not sufficiently motivated or have not been challenged to "try hard enough" in these areas. Some assume that delinquent youths are too callous and hostile to be able to manage their emotions and think responsibly, and therefore that these youths must be trained to follow the law and punished for not doing so.

The scientific and clinical literature on trauma (Ford, 2002), delinquency (Lahey et al, 1999), and brain development (De Bellis, 2001) paints a different picture. Dodge and colleagues (1995) found that abuse, and not family or genetic factors, was the primary reason why children and youths who had problems with hostility and aggression had difficulty in managing their emotions without becoming overwhelmed, impulsive, or shut-down, and in thinking through problems without relying upon aggression as a substitute for a solution. The emotion regulation and social information processing problems documented by Dodge and colleagues (1995) exemplify "victim coping" and fit the profile of resentful and resigned coping that has been found to be characteristic of severely abused children (Chaffin et al., 1997) and aggressive children (Zelli et al., 1999). Dodge et al. (1997) also found that youths with the most severe behavior problems who also had been physically abused showed clear signs of the behavior problems early in

childhood, and seemed to be reacting in an attempt to fight back against either being blamed or rejected or feeling alone and powerless. Other youths with severe behavior problems who had not been physically abused tended to show the first signs of problem behavior later in childhood or adolescence and to be more proactive than reactive in committing pre-meditated aggression or crimes. Thus, traumatically victimized delinquent youths may be neither callously indifferent nor actively motivated to harm others or violate the law. They may instead be trapped in a vicious cycle of fear, powerlessness, hopelessness, confusion, reactive behavior, and further victimization. These children and youths may have deficits in innate intelligence that make them less able to cope with being victimized than other children who have greater inborn intellectual capacities, but they also may be highly intelligent and using their intellectual skills to survive.

Therefore, another practical implication for judges is that court-ordered evaluations and services should address not only evident behavioral, psychiatric, and learning problems (e.g., defiance of the law, disregard of people, depression, substance use, deficits in attention and impulse control, school performance), but also should assess and enhance the youth's skills for emotion regulation and social information processing.[2] This is a crucial first step to rehabilitation. On the other hand, if a careful evaluation determines that trauma and victimization have not played a major role in a given youth's life, or if the youth's primary adaptation has been to systematically and callously victimize others, the judge can order more restrictive programs knowing clearly that the role of traumatic victimization has been ruled out or is secondary to sociopathy.

Emotion Regulation and Information Processing: A Family Matter

Lynch and Cicchetti (1998) found that abused children were more likely than other children to think of their nonabusive mothers as unavailable, untrustworthy, unloving, or unreliable. Thus, abuse can lead to a profound sense of betrayal that can develop into a defiantly negative attitude toward a primary caregiver, and to the belief that relationships can never be trusted because they always involve betrayal. To compound the problem, victimized children often learn to associate feeling emotion with a sense of trauma and victimization. Pollak, Cicchetti, and Klorman (1998) concluded that abused children often learn to be profoundly distrustful of, and resistant to, their own emotions. For example, where a nonabused child may interpret feelings of distress as transient anger or frustration that are nothing to be ashamed of and that will get better, an abused child might feel overwhelmed by intolerable rage, hatred, or suicidality (Ford, 2002). Delinquency also often begins with two other pernicious "d's": depression or demoralization (Biederman, Mick, & Faraone, 1998). Delinquent youths may be trapped in a battle with their own reactive emotions and fear the harm that unbridled emotions seem to cause. The battle often begins and almost always is played out with the adults to whom the youth looks as caregivers. This dilemma has two practical implications.

The first implication is that family involvement is essential not only to bring to bear the positive influence of the family in supporting and supervising the youth, but also to help youths and families deal constructively with feeling abandoned or betrayed if traumatic victimization has occurred. We have found that teaching families as well as youths the skill set for emotion regulation and clear thinking facilitates helpful family involvement, especially when victimization has been an issue.[3]

Teaching Emotion Regulation and Information Processing as a Form of Delinquency Prevention

The second implication is that youths entering, or on the verge of entering, the juvenile justice system need services that help them manage their emotions and think clearly before they become trapped in delinquency and dependent upon victim coping. Judges can be an invaluable source of early detection of victimized children before their behavior is so severe and chronic that they have caused serious harm and been labeled as incorrigible. Many of the youths whom judges see in a first arrest or in dependency hearings are not yet "acting out" to a degree that draws legal attention, but are shutting down and going underground emotionally in

2 Several protocols for teaching traumatized youths these skills are available through the NCTSN (www.nctsnet.org).

3 Our skill set for emotion regulation and information processing is described online at www.ptsdfreedom.org.

order to survive highly stressful and often traumatic life circumstances. These youths need a clear message that their behavior must change, and those who have been traumatically victimized also need help in gaining emotion regulation and social information processing skills in order to choose a better path.

When youths understand how their traumatic experiences have created a bias in their brains and bodies toward seeking to survive and avoiding victimization, they often feel motivated (and for the first time, hopeful) to learn how to use their brains and care for their bodies in ways that build not only self-esteem but also the ability to determine for themselves when and how to react to stressors. Many victimized delinquent youths have adopted societal biases that portray them as controlled by an inborn "badness" which they are powerless to change. The paradigm shift to viewing delinquency and victimization as involving correctable problems with emotion regulation and information processing offers new hope and direction. Optimally, placements and services will provide youths with activities and feedback that highlight how emotions and clear thinking are necessary to not only survive but also to thrive. This requires interventions that help youths recognize and understand the validity of intense and painful emotions that are the result of past victimization. Such interventions do not encourage extreme emotional reactivity (e.g., explosive reactions or numbed-out "shutting down"). Instead they teach youths to identify emotions in a timely, safe, and thoughtful manner (e.g., in supportive private discussions with a trusted adult or peer), so that emotions become both manageable and a source of helpful information rather than yet another source of victimization.

Importance of Considering Emotion Regulation and Information Processing in Judicial Decisions

A related implication is that, even if a child's exact trauma history is not known or is in dispute, including services that enhance emotion regulation and social information processing can have a positive impact both on competency and due process. Competency issues can be raised by the prosecutor, defense attorney, or the court for defendants younger than 12 who have a diagnosis of mental illness or mental retardation, borderline intellectual functioning or learning disabilities, or who have been observed to show deficits in memory, attention, or interpretation of reality (Grisso, 1998). Compliance with authority, ability to understand risks, and future development tend to be impaired in younger children to the point of similarity with seriously mentally ill adults (Grisso et al., 2003). Due process for such youths requires attention to these competency deficits in court proceedings and in court-ordered services or placements (Mitchell, 1996).

A youth who does not have an evident psychiatric disorder or profound learning or intellectual deficits may nevertheless be impaired by the kinds of emotion dysregulation and social information processing problems that result from victimization—and due process may require that court orders and proceedings address these less evident but equally detrimental threats to competency in younger defendants and sources of compromised self-management in older youths. This is an important point for future research in light of the U.S. Supreme Court decision in *Dusky v. United States* (1960), which set competence as a functional test and one that can be impacted by mental illness or immaturity. A later decision, *McKeiver v. Pennsylvania* (1971), contrasted due process requirements in adult proceedings with the less rigid standards in juvenile courts (Grisso et al., 2003). Competence in youths may not be an "all or nothing" construct, but may require a degree of ability to think abstractly, to communicate with counsel, and understand the proceedings (Zapf & Roesch, 2005). If emotion dysregulation and information processing problems compromise these features of competence, those skills will need to be enhanced in order to render some youths truly competent.

There is wide variability in judicial judgments. In an analysis of bail release orders it was clear that both legal and extra-legal factors are considered by judges in decision making, and that training can have an impact on judicial choice (Dhami, 2005). Judges both need and can greatly benefit from emerging scientific and clinical knowledge about causes of delinquency and promising interventions that are being developed. With this knowledge, judges' orders can be not only rehabilitative and beneficial for community safety, but also can contribute to violence and crime prevention on a broader level (Federal Advisory Committee on Juvenile Justice, 2005;

Sherman et al., 1998). Violence reduction is a promising goal requiring cross-system involvement, including the courts (Greenwood, 1996; Wilson, Lipsey & Derzon, 2003). A range of programs that have emotion regulation and information processing as a common denominator have shown promise for youth violence prevention (National Mental Health Association, 2004).

What About Girls?

We used the example of Janelle rather than a delinquent boy because, despite the fact that fewer girls than boys are identified as delinquent, girls increasingly are being detained for delinquency and are equally vulnerable to traumatic victimization (Abram et al., 2004; Cauffman et al., 1998; Steiner et al., 1997). Consistent with socioculturally based differences in sex role socialization, girls are more likely than boys to admit to anxiety or depression (Compas et al., 1997). Girls whose temperament or problematic early relationship experiences place them at risk for delinquency (Lahey et al., 1999) may react primarily inwardly with anxiety, depression, bodily distress, or social isolation (Feiring, Taska, & Lewis, 1998). Although girls sometimes act out in the more stereotypically male form of overt defiance or aggression (Cauffman et al., 1998), they often suppress overt aggression (McFadyen-Ketchum, Bates, Dodge, & Pettit, 1996). Both depression and overt aggression can be serious problems for delinquent girls, and the combination can be highly dangerous and explosive. Suppression of aggression may interfere with a girl's development of assertive social competence (Fagot & Leve, 1998), potentially leading to both "internalized" problems with anxiety, depression, or eating disorders and "acting out" in the form of hostility, rage, and extreme violence.

Delinquent or acting-out girls are at high risk for: (a) self-devaluation (Fagot & Leve, 1998); (b) anxiety and depression (Lipman, Bennett, Racine, Mazumdar, & Offord, 1998); (c) suicidality (Wannan & Fombonne, 1998); (d) conflict in family and school due to rule-breaking, truancy, and curfew violations (Zoccollilo, Tremblay, & Vitaro, 1996); (e) substance abuse (Brown, Gleghorn, Schuckit, Myers, & Mott, 1996); and (f) adult criminality, addiction, violent relationships, and psychiatric disorders (Pajer, 1998). Thus, a negative cascade may apply to girls as well as to boys.

Moreover, delinquency may take a more "covert" or "internalized" form for some boys as well as for girls. Nagin & Tremblay (1999) found that many boys went from having problems with aggression to "overt delinquency" (e.g., physical violence), but boys who were non-aggressively defiant developed problems with "covert delinquency" (e.g., stealing, vandalism).

A practical implication for judges is that both delinquent boys and girls may need help in developing ways of dealing with relationships that are responsibly assertive, and this is especially important for many girls who end up in juvenile court because they have learned covert ways to protect themselves from traumatic victimization that violate the law or social conventions. For example, Janelle's avoidant, violent, substance-abusing, and sexually promiscuous behavior gave her a sense of invulnerability that helped her cope with feeling terrified and helpless in relation to her abusive stepfather and neglectful mother. She did not actually enjoy violence or sex on these terms, but she felt she had to use whatever means she had available to protect herself not only from boys and men but also from the hostility and rejection she faced from her mother and feared from other girls. In the residential program, Janelle had the chance to safely get to know other girls in a non-competitive manner (although she often found herself falling back on habitual ways of hurting or intimidating other girls when stressed), and this enabled her to view relationships and sexuality in a more secure manner and as a way to be safe and happy rather than as a way to use herself or others.

Conclusion

In recent years, courts across the country have drifted from a rehabilitative model to a more punitive model. Yet, even while this shift occurs, courts are implementing new ideas and strategies to manage delinquency and protect children from maltreatment by forming partnerships with mental health providers or court clinics that can extend mental health services to youths and families without requiring judges to be social workers (Grudzinskas, Clayfield, Roy-Bujnowski, Fisher & Richardson, 2005; Mitchell, 1996). With the evidence of widespread trauma among incarcerated youths (Abram et al., 2004), courts may soon begin to extend these innovations by giving stronger consideration to the role

of trauma in delinquency and permanency decisions.

Ultimately, the shared goal of scientists, clinicians, and judicial professionals is to develop a scientific and humane basis for matching each youth with the least costly and most helpful disposition and services (Steadman, Redlich, Griffin, Petrila, & Monohan, 2005). We have a long way to go before the harm done by traumatic victimization is eradicated or even widely ameliorated. Although nationally the levels of reported incidents of violent victimization were reduced by as much as 20% between 1994 and 1997, youths remain at higher risk than any other age group (Rand, 1998). For example, in 1996 the rate of homicides annually was almost four times higher for youths than that for adults (15 versus 4 per 100,000; Bilchik, 1999). The obvious manifestations, such as gang violence and school shootings, highlight the terrible damage that traumatic victimization can cause in the lives of children, and the terror and loss with which their families and communities must grapple. These tragedies challenge us all both to prevent victimization, and to identify, protect, and treat survivors of victimization rather than inadvertently sentencing them to more victimization.

Recognizing that traumatic victimization may contribute to delinquency opens up new options for judicial review and disposition that constructively address (and do not excuse or overlook) the harm done by violent or deviant behavior. Each delinquent youth—whether victimized or not—who receives help in regulating emotions and processing social information is one more person who has the opportunity to not merely survive victimization, but to be restored to the full status of a member of society. Such a person has and gives to others a genuine sense of hope that victimization and delinquency are not dead-ends but instead challenges along life's pathway that can be overcome.

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The State of the Debate About Children's Disclosure Patterns in Child Sexual Abuse Cases

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ABSTRACT

In current research studies about the disclosure patterns of sexually abused children, experts agree that most victims delay disclosure for years, often until adulthood. Researchers disagree about disclosure rates and recantation rates among children during formal interviews. Studies of children who had not previously disclosed but are known through corroborative evidence to have been sexually abused show lower rates of disclosure than do studies of children who had disclosed prior to the formal interview. Gradual disclosures among children are common, and more than a single interview may be necessary in some cases. Prior disclosure, level of support by non-offending parents, developmental level, and relationship to perpetrator affect children's rates of disclosure and their disclosure patterns. More research is necessary to clarify children's post-disclosure recantation rates and predictors.

INTRODUCTION

Cases involving child sexual abuse (CSA) are among the most heartbreaking cases a judge hears, for both emotional and legal reasons. How does the court evaluate the testimony of the young child who says it never happened, the child who discloses months after the alleged event, the girl who recants after visitation with family members, or the boy with an IQ of 51 who cannot clearly articulate how the alleged abuse occurred?

Proving child sexual abuse in the absence of physical evidence or testimony of an eyewitness is difficult. Children recant, child development issues intervene, and cognitive limitations raise questions, while the testimony of the adult perpetrator does not waiver. Indeed, although errors in either direction can have devastating consequences, finding the truth in CSA cases seems too often impossible. Decision makers confront the twin specters of leaving inarticulate children unprotected from further traumatic sexual abuse on the one hand, and subjecting innocent caregivers to criminal prosecution or the loss of parental rights on the other.

Science can be a tremendous asset to judges in understanding and interpreting the behavior of victims of child sexual abuse, since their behavior can often seem counterintuitive. It is essential that judges consider children's disclosure patterns in light of current research in order to have the greatest chance to evaluate the facts and find the truth. Children's disclosure patterns are crucial because physical findings are diagnostic of child sexual abuse in 10% or fewer cases (Frasier & Makaroff, this issue). Sexual abuse, especially when there is no penetration, rarely results in physical trauma. Even when there has been sexual penetration, the capacity for rapid healing of the genital anatomy inhibits the detection of evidence (The National Research Council, 1993, p. 72). Therefore, children's statements are central both to the prosecution of the crime of child sexual abuse and the protection of children from further abuse.

This review is intended to update criminal, juvenile, and domestic relations court judges who preside

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over CSA cases about current areas of agreement and disagreement among scientific researchers about the disclosure patterns of CSA victims. A major volume on abuse disclosure patterns is scheduled for publication in 2006 (Pipe, Lamb, Orbach, & Cederborg, in press). It contains chapters by researchers from differing perspectives that we have drawn upon for this article (London, Bruck, Ceci, & Shuman, in press; Lyon, in press). Unfortunately for those charged with making decisions about children's welfare, no single school of researchers has the last word on these controversial issues.

Brief History

Many scholarly papers about children's disclosure patterns either begin with a discussion of Roland Summit's Child Sexual Abuse Accommodation Syndrome (CSAAS) or structure their arguments around his model of children's behavior in these cases (London, Bruck, Ceci, & Shuman, 2005; Lyon, 2002; Lyon, in press; Summit, 1983). Summit argued that children often deny being sexually abused, even when they are directly asked, and that disclosing children often subsequently recant their allegations. He based the accommodation syndrome primarily on cases of intrafamilial child sexual abuse (incest) rather than extrafamilial child sexual abuse.

Although Summit's "syndrome" has been litigated with a variety of outcomes in many courts, it may have become so controversial that it obscures rather than clarifies the issues at hand. Judges should bear in mind that for almost a century before Summit published his influential paper, there was statistical evidence that children often delay disclosure or remain completely silent about sexual victimization. Indeed, this prior literature was so extensive that a major psychological journal rejected Summit's accommodation syndrome paper before it found publication elsewhere because, the reviewers argued, it contributed nothing new (Lyon, in press; Olafson, 2002). There have also been a number of studies documenting children's disclosure patterns in otherwise corroborated child sexual abuse cases since the 1983 publication of Summit's paper (Lyon, in press). Examining children's disclosure patterns one category at a time, without organizing them around Summit's now-controversial accommodation syndrome, may clarify and simplify the issues.

The Issues

What are the disclosure and non-disclosure patterns among children known to have been sexually abused? There are several issues:

- Do most child victims delay reporting sexual abuse, sometimes until adulthood?
- If directly asked, do most child victims disclose sexual abuse?
- If directly asked, do some CSA victims initially fail to disclose or deny being abused, so that more than one formal interview becomes necessary?
- How common is incremental abuse disclosure, from partial and fragmentary accounts to full disclosure over time?
- Once children have disclosed sexual abuse, do a high percentage of known victims subsequently recant or retract their disclosures?
- Are there factors such as gender, developmental level, culture, degree of abuse severity, parental support, and relationship to perpetrator that influence disclosure patterns among CSA victims?

Sources of Information

The two most reliable sources of information about disclosure patterns in CSA victims are:

- Retrospective surveys of adults who report having been sexually abused during childhood; and
- Research about children's statements during evaluation and treatment in cases with corroborative evidence that is independent of children's statements, such as videotapes of the actual abuse, physical findings, sexually transmitted diseases, and offender confession.

Both sources are imperfect. Cases that have independent corroboration may be unrepresentative of sexual abuse cases in general. Retrospective surveys depend on human memory over time, so that under-reporting, over-reporting, and inaccurate reporting may occur.

Nevertheless, cases with independent corroboration and retrospective surveys are superior to the other sources sometimes used in literature reviews. For example, studies that claim substantiation or conviction rates as "independent" corroboration may significantly inflate the percentages of actually abused children who disclose their victimization during formal questioning. This is because substantiation, prosecution, and

conviction depend so heavily at all decision stages on children's statements. To argue that substantiation rates that depend upon children's disclosures proves that most children make disclosures when interviewed is to argue in a circle (Lyon, in press).

The definitions of key terms also affect research outcomes, but researchers do not always specify their operational definitions. "Child sexual abuse" can include a wide variety of behaviors, from non-contact exposure to genital fondling to violent genital, oral, and anal rape. In this article, we focus primarily on contact child sexual abuse. "Disclosure" also has a variety of meanings. We define disclosure to mean a clear verbal statement that at least one abusive act took place, although a disclosure need not be a complete report of everything that happened. Our definition does not include suggestive doll play and other fragmentary "partial disclosures" that, when included in research studies, artificially inflate children's "disclosure" rates (e.g. Dubowitz, Black, & Harrington, 1992).

"Non-disclosure" can also vary in meaning depending on whether it refers to a child's non-disclosure during a single or initial interview or a child's non-disclosure maintained over six or more interviews. Children questioned only once show higher "non-disclosure" rates than do children questioned several times, so that studies such as that by Sorenson & Snow (1991) that show very high initial non-disclosure rates have an eventual disclosure rate of over 90%.

Child Sexual Abuse Disclosures Delayed Until Adulthood

There appears to be a consensus among researchers that most child sexual abuse victims delay disclosing, often until adulthood. A number of well-designed retrospective surveys now show that the great majority of victims delay disclosing contact child sexual abuse during childhood (Finkelhor, Hotaling, Lewis, & Smith, 1990; Smith et al., 2000). These surveys also indicate that even when adults recall having told someone about the abuse, the majority of these cases were not then reported to the authorities. In one survey, 28% of respondents stated that they had disclosed to no one before telling the telephone interviewer about the child sexual abuse (Smith et al., 2000); another survey found that 42% of men and 33% of women first told anyone about having been sexually abused as children when asked during the retrospective telephone interview (Finkelhor et al., 1990).

London and colleagues (2005) summarize the retrospective literature by noting that the results of 10 retrospective surveys indicate that only one-third of adults who suffered child sexual abuse revealed the abuse to anyone during childhood. The study concludes that "approximately 60%-70% of adults do not recall ever disclosing their abuse as children, and only a small minority of participants (10%-18%) recalled that their cases were reported to the authorities" (London et al., 2005, p. 203). Although London and colleagues note the research limitations inherent in adult retrospective literature, they also write, "Given the differences in methodology, definitions of abuse, and sample characteristics, the general consistency of these findings across these studies is noteworthy" (London et al., 2005, p. 201; but see Poole & Dickinson, 2005).

Judges and other fact finders can only adjudicate those cases that come to their attention, and a child's prior disclosure to a caregiver or friend constitutes the most common means by which child sexual abuse comes to the attention of the authorities and thus to the courts (Lyon, in press). Therefore, because it appears that most people delay disclosing until adulthood, children who decide to tell someone about being sexually abused and whose cases therefore come to court are not representative of sexually abused children in general. In other words, child protection authorities and the judiciary are likely to see only a minority of those children who are actually being sexually abused. There are, of course, some sexual abuse cases that are reported for reasons other than a child's prior disclosure, such as children's sexualized behaviors, physical findings, and other external evidence. This review article focuses on the disclosure patterns and behaviors among both groups of sexually abused children, those who had previously disclosed and a smaller number of those who came into the system in some other way.

Child Sexual Abuse Disclosures Delayed within Childhood

There appears to be agreement among researchers from diverse perspectives that "when children do disclose, it often takes them a long time to do so" (London

et al., 2005, p. 204). In a study of 399 children aged 8 to 15, Elliott and Briere (1994) find that of 248 subjects assessed as having been sexually abused, 74.9% did not disclose their abuse to anyone within the year that it first occurred, and 17.8% had waited more than five years to tell anyone. The courts are likely to see many such cases in which children delayed reporting for months or even years before telling someone about the abuse. It is also not unusual for children to disclose the abuse long after adjudication when they are in a safe environment and the litigation is finished. Delays in telling anyone about the abuse for several months, a year, or even longer occur in a significant percentage of child sexual abuse cases (Henry, 1997; Sas & Cunningham, 1995).

In weighing the evidence in child sexual abuse cases, judges and other fact finders should be aware that, in a high percentage of actual CSA cases, there will be delays of months or even years between the onset of the abuse and a child first disclosing to another person.

Children's Gradual Disclosures during Formal Interviews

Many prosecutors are familiar with the problem of incremental disclosure, in which a child may disclose only aspects of an abusive event, such as genital fondling, during the initial interview. Shortly before trial is scheduled to begin, the child, perhaps during court preparation with the prosecutor, describes new details, such as penetrating oral sex, that necessitate postponements, the filing of new criminal charges, and concerns about the child's credibility and competence. In one such case, a young incest victim, when asked why she had not mentioned crucial additional information during her initial advocacy center interviews responded, "I just didn't think of it." This pattern of partial disclosure can be explained by Summit's classic child sexual abuse accommodation syndrome, but it may also simply reflect the usual patterns of recall in the very young. In an experimental study, Dr. Robyn Fivush asked non-abused children aged 3-6 about a known event on two subsequent occasions (Fivush, 1994). On the two recall occasions, children reported different but still accurate information about the events, with an overlap of details between the two retellings of only 20%. This research about children's normal patterns of recollection and reporting could in itself justify recommending that children be given more than a single interview to tell the authorities about the events in their lives.

In a summary of 21 studies from 1965 to 1993 of children diagnosed with gonorrhea, Lyon finds gradual disclosure by children to be very common (Lyon, in press). In 118 CSA cases studied by Elliott and Briere (1994), there was external evidence for the abuse, including, for example, medical evidence diagnostic of child sexual abuse, perpetrator confession, a witness to the abuse, or pornographic pictures of the child. In a number of these 118 cases, victims disclosed partially in the first interview by mentioning fondling, but when investigators confronted them with the external evidence for more severe abuse (penetration), the children then made more complete disclosures.

Thus, when questioned during formal interviews, children may only partially disclose during the initial interview. Because evidentiary studies show that traumatic medical evidence (such as a ruptured hymen) is lacking in a significant number of cases in which perpetrators have confessed to penile penetration, judges should not prematurely regard children's statements as complete after a single interview (Muram, Speck, & Gold, 1991). As Elliott and Briere (1994) write, "Forensic evaluations that consist of a single interview may result in incomplete disclosure and less accurate determinations, especially in cases where medical or other external data are lacking or inconclusive" (p. 274).

This recommendation does not contradict the long-held principle in the child protection fields to avoid subjecting children to repeated interviews by multiple investigators from social services, law enforcement, and the court system. The National Children's Advocacy Center has developed and tested guidelines for extended forensic evaluations with reticent children. If several interviews become necessary, it is recommended that a single interviewer conduct them and that the questioning be sensitively structured to build rapport over time and avoid repetitive questioning and suggestiveness (Carnes, Wilson, & Nelson-Gardell, 1999; Carnes, Nelson-Gardell, Wilson, & Orgassa, 2001).

Because many sexually abused children in externally corroborated cases are known to disclose only gradually, more than a single interview may become necessary to serve children's safety and justice. See the guidelines by the National Children's Advocacy Center (Carnes et al., 1999; 2001).

Non-Disclosure or Denial by Children When Interviewed about Child Sexual Abuse

The most troubling cases for the courts are those in which there are red flags indicating a strong possibility of child sexual abuse: The case is reported, the child interviewed, and the child discloses no sexual abuse. There are two classes of children to consider here:

- Children who previously disclosed partially or fully to another person and thus precipitated entry into the system; and
- Children who came into the system through other means, such as diagnosis of a sexually transmitted disease during routine medical care, extreme sexualized behaviors, or the discovery of videotapes documenting the abuse.

It is about children's disclosure patterns once they are in the system that the experts disagree, and these cases are the most troubling to those responsible for protecting children from abuse and protecting adults from false allegations.

London et al. (2005) state that "the data clearly demonstrate that most children who are interviewed about sexual abuse do disclose and do not later recant…" (p. 217).

Lyon (in press) responds with a critique that reveals problems with two kinds of case selection bias in many of the samples upon which London and colleagues based the above conclusion. Lyon argues that:

- To avoid **suspicion bias**, one must examine cases that did not come to the attention of the authorities because a child disclosed to someone prior to the formal interview; and
- To avoid **substantiation bias**, one must examine cases in which substantiation was completely independent of the child's statements.

To understand how both forms of selection bias artificially inflate the actual rates of children's sexual abuse disclosures, consider the following extreme case. If we *suspect* sexual abuse only when a child has previously disclosed, then **100%** of children in a sample of children suspected of being sexually abused will have disclosed at some point. If we *substantiate* child sexual abuse only if a child discloses, then **100%** of children in a sample of substantiated cases will have disclosed. The reality is only somewhat less extreme. The great majority of *suspected* CSA cases come to our attention only because a child has previously disclosed. Child sexual abuse *substantiation* also depends most heavily on children's disclosures, because external evidence of child sexual abuse (such as physical findings or offender confession) is rare and generally detected only after sexual abuse has been suspected.

London et al. (2005) seem to agree with Lyon about suspicion bias by writing, "Prior disclosure of abuse predicts disclosure during formal assessment" (p. 209), but they do not then systematically deal with the problem of suspicion bias. London and colleagues also acknowledge but do not fully address the substantiation bias problem by writing, "In many of the cited studies, classification of abuse was often based in part on children's disclosures; consequently, the conclusion that abused children do disclose abuse during formal interviews may be circular" (p. 217). They then base their conclusion that "the evidence fails to support the notion that denials, tentative disclosures, and recantations characterize the disclosure patterns of children with validated histories of sexual abuse" (p. 194) on their review of research studies that are in many cases flawed by both suspicion and substantiation bias. What do studies that avoid both biases tell us about this area of contention?

Studies of Disclosure Patterns in Cases without Selection Bias

Nine boys and one girl were interviewed by police after Swedish law enforcement discovered videotapes of 102 incidents of child sexual abuse, ranging from exposure of the child's genitals to oral/anal/vaginal intercourse (Sjoberg & Lindblad, 2002). The perpetrator was either related to the children or knew them through his work at a day care center. Abuse severity was coded both from the videotapes and from children's statements. No child had previously disclosed abuse nor had it been suspected. Five children reported no abuse during police interviews, for a disclosure rate of 50%. The child who had suffered

the greatest number (60 incidents) and most severe sexual assaults according to the videotaped evidence did not disclose during the police interview. Two of the five children who did disclose did so only in response to leading questions. No child reported any sexual behavior not documented on the videotape.

Cases with children not suspected to be sexual abuse victims who are diagnosed with sexually transmitted diseases, who are too old to have acquired the diseases congenitally and too young to have acquired them through consensual sex with peers, also avoid both suspicion and substantiation bias. Confining this review to STD diagnosis deals with the problem raised by London et al. (2005) that "medical evidence" is not always a "reliable benchmark" because, for example, genital redness may be caused by many things besides sexual abuse.

Lawson and Chaffin (1992) found that among 28 children in which STDs were medically diagnosed without prior suspicion of abuse, only 12 children (43%) made an allegation of sexual abuse during the initial formal interview, and 16 children did not. Almost half of these children had shown no physical or behavioral symptoms of sexual abuse, so that there were no "red flags" that would have otherwise brought these children into the system as possible CSA victims. Maternal attitude influenced disclosure patterns greatly. Among those children whose parents were supportive, 63% disclosed abuse during these initial interviews, whereas when caregivers expressed skepticism, only 17% disclosed.

Of the 16 false negatives in the original Lawson and Chaffin study, five were subsequently located and consented to be interviewed. Four of these five had a supportive parent and one a non-supportive parent. Researchers presented the study to parents and children as an evaluation of responses to prior emergency room visits, and they never mentioned child abuse. Nevertheless, four of the five parents spontaneously told the researchers that their children had disclosed sexual abuse some time after the initial hospital interview, a finding that supports the idea that CSA disclosure is often an incremental process that may require more than a single interview (Chaffin, Lawson, Selby, & Wherry, 1997). Upon psychological testing, the four non-disclosing children whose parents had been supportive at the time of the initial interview tested three times higher on dissociative symptoms than did the disclosing children and nine times higher on dissociative symptoms than non-abused control children. Because of the nature of this study and the very small numbers of children involved, these results are far from conclusive, but they do suggest a possible link between dissociative symptoms and non-disclosure among CSA victims.

London et al. explain the Lawson and Chaffin results by describing this sample as "unusual" and as representing "the small hard core of children who do not disclose abuse when directly asked" (2005, p. 215). Lyon argues in response that the Lawson and Chaffin sample avoids the problems of suspicion and substantiation bias that characterize many other samples. Lyon then raises a concern about the many cases that are closed as unsubstantiated after a single interview during which a possibly sexually abused child without medical evidence fails to disclose when formally questioned.

A number of other samples document similarly low rates of disclosure in STD cases. Lyon examined 21 studies published between 1965 and 1993 of children diagnosed with gonorrhea. In nine of these papers, the authors referred to a "history" of sexual contact or sexual abuse for some of the children with gonorrhea, without clarifying whether this history came from children's disclosures or from other sources (Lyon, in press). In most of the remaining studies, the authors used words such as "admitted" or "denied" sexual contact or referred even more directly to children's statements. Even when all the cases of "history" were counted as actual child disclosures, Lyon finds that the average rate of "disclosure" among the 579 children in these studies was 43%, or 250 children. Given the broad definition of "disclosure" that he applies here, Lyon argues that this may actually be an overestimate of disclosure rates. Most of these studies indicated that the medical professionals questioned the children, but the precise nature of these questions is not known. When Lyon omits studies with children younger than three years of age to control for developmental limitations on narrative skill, he finds that 185 of 437 children, or 42%, disclosed.

To summarize this sample of disclosure studies that avoid both suspicion and substantiation bias, Sjoberg and Lindblad find a disclosure rate of 50%, Lawson and Chaffin find a disclosure rate of 43%, and in a review of 21 studies of children diagnosed with gonorrhea, Lyon finds a disclosure rate of 43%. London et al. (2005) assert

that when CSA victims are interviewed, a "majority" of them disclose sexual abuse. These 23 studies contradict that assertion by showing that only from 42% to 50% of children known through external evidence to have been sexually abused actually disclosed during their formal interviews.

We agree with London and colleagues that "If the field is to be guided by scientifically validated concepts then this must be predicated on the literature that comes closest to the standards of science" (2005, p. 220). Research studies that avoid suspicion bias and substantiation bias come closer to this scientific standard than do research studies that suffer from one or both of these biases, and these studies show far lower rates of children's disclosure of child sexual abuse than London et al. (2005) assert.

When children who have not previously disclosed are interviewed, and these children are known to have been sexually abused because of external corroborating evidence, their rates of disclosure range from 42% to 50%.

Studies of Child Sexual Abuse Cases that Avoid Only Substantiation Bias

Studies of previously disclosing children will generally show higher rates of disclosure than do studies in which children had not previously disclosed, because prior disclosure predicts children's disclosure during formal interviews. The majority of cases that judges are likely to see will involve previously disclosing children, because child sexual abuse is most often suspected when a child says something to a caregiver or friend that brings the case into the system. However, many research studies do not fully document whether or not a child disclosed prior to entering the system. Others state how many children disclosed to another person prior to the formal interview. Both categories are reviewed in this section.

Hershkowitz, Horowitz, & Lamb (2005) examined all interviews with alleged victims of sexual abuse, aged 3 to 14, in Israel from 1998 to 2002 (10,988 interviews). Most of the alleged victims were aged 7 to 14. During one interview, 71.1% of these children made allegations of child sexual abuse. Boys were less likely than girls to allege sexual abuse. Children aged 3-6 were less likely to make allegations than children aged 7-10, and children aged 11-14 had the highest rates of allegation. Children were much less likely to make allegations when the suspect was a parent or parent-figure. This very large study confirms patterns observed in smaller U.S. samples. However, because of limitations in the data set, the authors did not state which children had made disclosures prior to the formal interviews, although it is known that prior disclosure is the primary means by which cases come into the system (Lyon, in press). The authors were also unable to determine from the data set which children had been interviewed more than one time. Finally, it was not possible to analyze separately those cases that had independent evidence corroborating child sexual abuse, so that the validity and non-validity of the children's allegations could not be determined.

Elliott and Briere (1994) find that 39 of 118 (33%) children aged 8 to 15 for whom there was external evidence of child sexual abuse made no disclosure about having been sexually abused during formal interviews, and some of the remaining 67% of children with external evidence who did disclose required more than one interview to do so. Twenty of these children had reportedly disclosed to another person before the interview but did not do so during the interview, and 19 disclosed to no one either before or during the formal interview. A higher percentage of the non-disclosing children had mothers who were not supportive. There was a higher percentage of African-American children among the non-disclosing group. Victims were aged eight through adolescence, and other research has shown that school-aged children and adolescents are more likely to disclose sexual abuse when questioned than are younger children (DiPietro, Runyan, & Frederickson, 1997; Hershkowitz et al., 2005; Keary & Fitzpatrick, 1994; London et al., 2005; Lyon, in press; Sas & Cunningham, 1995). London et al. mistakenly calculate a disclosure rate of 84% in the Elliott and Briere study, a percentage that is inflated because of substantiation bias. London and colleagues (in press) calculated the 39 non-disclosers against the 248 children classified as "abused," although the 248 substantiation figure includes over 100 children classified by the researchers as abused because they made "consistent, detailed, contextually embedded, developmentally age-appropriate accounts of at least one abusive incident" (Elliott & Briere, 1994, p. 264). When substantiation bias is eliminated and the 39

children who did not disclose during formal interviews are measured against the 118 cases with corroborative evidence independent of children's disclosures, the disclosure rate during formal interviews is 67% and the non-disclosure rate of known victims is 33%.

In their forthcoming chapter, London et al. also cite inflated 75% disclosure statistics from a study by Dubowitz et al. (1992). There were 28 children in that study who had medical examination findings indicative of child sexual abuse, and of these, 13 fully disclosed, 7 did not disclose, and 8 "partially disclosed." London et al. (in press) must be including the 8 partial disclosers in this high percentage, although these partial "disclosures" are described by Dubowitz et al. (1992) as "suggestive doll play or an inconclusive account of alleged abuse" (p. 690). When only real disclosures are included, the disclosure rate in the Dubowitz study is 46%.

Finally, because of methodological shortcomings in two older studies, Sorenson and Snow (1991) and Bradley and Wood (1996), they are reviewed only briefly here. Sorenson and Snow report a 72% initial non-disclosure rate by children, and Bradley and Wood report a 7% total non-disclosure rate apparently over the course of several interviews. The end results for both studies do not differ greatly. Bradley and Wood write that 95% of the children in cases that had external evidence of child sexual abuse similar to that used by Sorenson and Snow "made a partial or full disclosure of abuse during at least one interview with DPRS or police" (p. 885). In their evaluation and treatment sample, Sorenson and Snow write that 96% of the children for which there was external evidence eventually reached "active" disclosure, often after weeks or months of treatment.

Prior disclosure predicts disclosure during formal interviews. However, in externally corroborated cases in which children have previously disclosed, a substantial percentage of children do not disclose during the first formal interview. Many of these children do disclose if given the opportunity in subsequent interviews.

Recantations

A 10-year-old girl who has told investigators that she was repeatedly sodomized by her soccer coach comes to the witness stand during criminal proceedings, freezes, and mumbles to the jury that she "cannot remember" what happened; as with many cases of anal penetration, there is no medical evidence. An adolescent boy who has told his school counselor that his stepmother "messes with my dick" explains to the child protection investigator the next day that he was "just kidding." A preschool girl who has reportedly told her divorced mother that her daddy "tickles my coochie and it hurts," climbs under a table during the advocacy center interview and denies ever visiting her father. Are these children withdrawing their allegations because they were never abused, or are they recanting true statements about abusive events?

These are among the most challenging cases to investigate and to litigate. There are far fewer studies on recantation than on delay, non-disclosure, and disclosure, and there is not yet definitive research about recantation rates in externally validated cases. Recantation rates in various studies range from 4% (Bradley & Wood, 1996) to 22% (Sorenson & Snow, 1991). Most studies of recantation rates contain serious methodological flaws. Therefore, we cannot agree with the statement by London et al. (2005) that "only a small percentage of children in these studies recant" (p. 217). It is more accurate to state that we simply do not yet know how often and why children recant their statements about actually having been sexually abused.

There is research currently under way. Malloy, Lyon, Quas, and Forman (2005) recently presented results from a random sample of 217 substantiated CSA cases from the Los Angeles Dependency Court in 1999-2000 to discern disclosure patterns across all interviews. Children were aged 2 to 17, and 90% were female. Most of the children had from 3 to 9 interviews. The majority (78%) had disclosed to someone prior to the police or social services interview, so that the low initial non-disclosure rate of 9% can be explained by this sample's suspicion bias. Twenty-three percent of the children fully recanted their allegations at some point, and an additional 11% minimized the severity of the abuse they had initially reported by partially recanting, for a total of 34% full or partial recanters. Lack of maternal support and abuse by a male caretaker were predictors for full recantation. In cases that had medical evidence corroborating the sexual abuse, 25% of the children either fully or partially recanted the allegation, and 24.5% of

children whose perpetrator confessed recanted at some point during the evaluation. The authors conclude that recantation is not rare in externally corroborated cases and in substantiated cases, when all interviews in each case are examined.

Recantations should not be interpreted to mean that an allegation is necessarily false. Unfortunately, criminal courts do not always agree. For example, in Florida, a prior inconsistent statement from a recanting alleged victim of child sexual abuse is not sufficient in and of itself to sustain conviction, even if repeated on multiple occasions (State v. Green 667 So.2d 756 Fla.,1995. West's F.S.A § 90.803(23)).

Researchers have not established whether recantations are frequent or infrequent, but they do occur in externally corroborated CSA cases, especially when abuse was by a male caregiver and/or maternal support was absent.

Bizarre Disclosures

Many children's cases never reach the courts because they contain bizarre and impossible details. These can include accounts of, for example, having been abused aboard rocket ships, having been abused by the Wizard of Oz, having been stabbed all over the body (without medical evidence), having murdered and dissected a baby, and other grotesque and extreme statements. In a random sample of 104 child sexual abuse and physical abuse "gold standard" cases with two forms of external evidence selected from a child protection facility, the blind scoring of transcribed disclosure statements shows that 15.38% of the most severe cases with victims aged 4-9 contained such implausible details (Dalenberg, 1996; Dalenberg, Hyland, & Cuevas, 2002). These fantastic statements were from cases in which the researchers could be certain that physical and/or sexual abuse had actually taken place. The rate of bizarre statements in the mild, externally verified cases from this sample was less than 4%. Because both true and false allegations can contain implausible details, their presence does not help investigators sort truth from fiction. What this study does indicate is that implausible details in an otherwise solid disclosure do not in themselves prove that an allegation is false. Indeed, these fantastic elements may indicate that the child experienced especially severe physical and/or sexual abuse.

Variables that Affect Disclosure Patterns

We agree with London and colleagues (in press) that future research with a multivariate model is necessary to find causal explanations for children's disclosure patterns, but there are some trends that seem to be emerging.

- *Maternal or parental support:* Children who lack caregiver support are far less likely to disclose than are children who have a supportive caregiver, when "support" is defined as a willingness to believe that the child sexual abuse could have happened (Elliott & Briere, 1994; Lawson & Chaffin, 1992). Elliott & Carnes (2001) find that a majority of mothers either believe or support children in CSA cases. Those cases that reach the courts may differ in crucial ways. Thus, in dependency court, familial support is often absent, hence the intervention of the state in the parent-child relationship to protect the child. The victim child, and often her siblings, are removed from their home, and sometimes there is an arrest of a family member who may be the breadwinner. In too many cases, the child is blamed, feels responsible for breaking up the family, and eventually recants (Malloy et al., 2005).
- *Relationship to perpetrator:* In some cases, the child is dissuaded from disclosing the abuse by family members who do not believe the child and wish to prevent shame and embarrassment to the family. Most studies demonstrate lower rates of disclosure or longer delays in doing so when abuse is by a family member rather than by a non-family member (Goodman-Brown, Edelstein, Goodman, Jones, & Gordon, 2003; Hershkowitz et al., 2005; Sjoberg & Lindblad, 2002; Smith et al., 2000; but see also Lamb & Edgar-Smith, 1994; London et al., 2005).
- *Age:* Retrospective surveys indicate that victims first abused during adolescence are more likely to disclose than are younger children, and they are more likely to disclose first to another adolescent than to a caregiver. Retrospective surveys also indicate that school-aged children are more likely first to reveal child sexual abuse to a parent than to another child (London et al., 2005, p. 201).
- *Gender:* In both retrospective surveys and child samples, there are suggestions that boys may be more reluctant to disclose than girls, although other abuse-specific variables may influence gender differences (Ghetti & Goodman, 2001; Goodman-Brown et al., 2003; Hershkowitz et al., 2005; Kendall-

Tackett, Williams, & Finkelhor, 1993; Levesque, 1994; London et al., 2005; Sas & Cunningham, 1995; Sauzier, 1989; Widom & Morris, 1997).

- *Culture:* Although more research needs to be done in the area of culture and disclosure rates, there are indications among child samples that children from minority groups face culture-specific barriers to disclosure that could contribute to delays or denials (Dunkerley & Dalenberg, 1999; Elliott & Briere, 1994; London et al., 2005, p. 205).
- *Severity and duration of abuse:* Research studies show inconsistent results. Future multivariate analyses accounting for severity and duration of abuse, age, gender, culture, and relationship to perpetrator may clarify this issue.
- *Batterers:* The courts should be especially alert to the potential for child sexual abuse by batterers, because research studies indicate that battering father-figures are from four to nine times more likely to perpetrate incest (primarily on girls) than are non-batterers (Bancroft & Silverman, 2002). Because of the atmosphere of terror that can permeate violent homes, both adult and child victims are often justifiably reluctant to speak up when formally questioned unless they can be convinced that they will not be in danger for doing so (Jaffe & Geffner, 1998).
- *Dissociation and post-traumatic stress:* Children subjected to prolonged, severe abuse may face multiple obstacles to adequate disclosure. Unwillingness to face the discomfort of post-traumatic flashbacks may cause traumatized children to numb their feelings and cognitions and shut down during interviews. Dissociative symptoms may interfere (Chaffin et al., 1997; Putnam, 1997). Cognitive disabilities caused by damage to the central nervous system and brain are associated in numerous studies with histories of severe child maltreatment in early childhood, and these deficits may interfere with children's ability to recall and describe their life experiences (Elliott & Briere, 1994; Putnam, this issue).
- *Modesty:* Modesty or embarrassment should also be considered as motives for silence. One laboratory study indicates that girls aged 5-7 are reluctant to disclose even non-abusive genital touching during interviews. Saywitz, Goodman, Nicholas, and Moan (1991) found a 64% false negative disclosure rate in a subsequent interview among girls who had been touched genitally and anally during a pediatric examination. It was only when the girls were directly asked with a yes-or-no question if the doctor had touched them on the genital and anal areas that these girls disclosed. This suggestive question produced a false positive rate of 8% (three girls) among those in the control group who had not been genitally and anally touched, and one of these girls provided contextual details. Most experts in the field warn against interview questions that name both act and perpetrator, and many courts define such questions as leading. Nevertheless, in this study, there were eight times as many false denials when this suggestive question was not asked than there were false allegations when it was asked.
- *Other reasons for non-disclosure:* When non-disclosing sexually abused children are questioned, they cite fear as their primary motivation not to tell. Older children who are familiar with dependency procedures know that they and their siblings may be removed from their home if they tell. Children may fear being stigmatized as "sluts" or "faggots" by their schoolmates if word gets out (and it too often does) that they are sexual abuse victims. Children may fear consequences to themselves, to the perpetrator, or to other family members (Goodman-Brown et al., 2003). Children often otherwise love and trust sexual abuse perpetrators, and in some cases, they may not be fully aware that what is happening to them is abusive, criminal, and wrong.

Conclusions

The most difficult form of abuse to prove in court is child sexual abuse, even in dependency cases where the burden of proof is preponderance of the evidence or clear and convincing evidence rather than proof beyond a reasonable doubt. Few convictions carry the same degree of stigma and legal ramifications for the convicted and the potential for serious emotional and psychological harm to the victim.

It is important to understand that the rules are different in sexual abuse cases, and every judge must understand the science. It is common in sexual abuse cases for the victim not to disclose in a timely manner. It is not unusual for the victim to disclose little by little over a period of time. It can happen that the child victim will recant. In any other prosecution for any other crime, these actions would be considered indicia of unreliability

SUMMARY OF RESEARCH FINDINGS

1. Experts agree that a majority of child sexual abuse victims do not disclose their abuse during childhood.
2. Experts agree that when children do disclose sexual abuse during childhood, it is often after long delays.
3. Prior disclosure predicts disclosure during formal interviews. Children who have told someone about the abuse prior to the formal interview are more likely to disclose during that interview than children who have not. Children who have not previously disclosed and who have come to the attention of the authorities because of medical evidence, videotapes, and other external evidence, are less likely to disclose during medical or investigative interviews than are previously disclosing children.
4. Gradual or incremental disclosure of child sexual abuse occurs in many cases, so that more than one interview may become necessary.
5. Experts disagree about whether children disclose sexual abuse when they are interviewed. However, when both suspicion bias and substantiation bias are factored out of studies, studies with external corroborating evidence of child sexual abuse show that 42% to 50% of children do not disclose sexual abuse when asked during formal interviews.
6. School-age children who do disclose are most likely to first tell a caregiver about what has happened to them.
7. Children first abused as adolescents are more likely to disclose than are younger children, and they are more likely to confide first in another adolescent than to a caregiver.
8. When children are asked why they did not tell about the sexual abuse, the most common answer is fear.
9. Further research is needed about recantation rates, which range in various studies from 4% to 22%.
10. Lack of maternal or parental support is a strong predictor of children's denial of abuse during formal questioning. Abuse by a family member may inhibit disclosure. Dissociative and post-traumatic symptoms may contribute to non-disclosure. Modesty, embarrassment, and stigmatization may contribute to non-disclosure. Gender, race, and ethnicity affect children's disclosure patterns.
11. Many unanswered questions about children's disclosure patterns remain, and further multivariate research is warranted.

or lack of truthfulness and would be legal and factual impediments to conviction. Indeed, a denial of abuse by the alleged victim would prevent prosecution.

In dependency cases, the court is bound to protect the health and safety of the child while balancing the rights of the parents. It is important that judges understand the science so that they can do justice when the defense lawyer argues, "It did not happen because the child recanted"; "It did not happen because the child's disclosures were not made close to the event"; "It did not happen because the child kept adding new information." As in domestic violence, the often frustrating behavior of the victim needs to be explained to the trier of fact from the victim's perspective, by those who have studied this behavior.

When justice is not done in a sexual abuse case, the harm can be devastating. No jurist wants to take a child from her home and break up a family when abuse has not occurred. No jurist wants to leave a child unprotected in an abusive family. The reality is that it is very often difficult for a judge presiding over a child sexual abuse case to feel certain about his or her decision and interpretation of the facts. Many judges spend sleepless nights worrying about the ramifications of their decisions.

Sexual abuse cases are specialized cases that require specialized knowledge, a tool judges must have in order to do justice. Knowing the law alone is not enough. By understanding the research in the sexual abuse field (see page 37 for a summary of research findings), judges can enhance their ability to make just decisions by applying the law to the facts.

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Medical Evidence and Expert Testimony in Child Sexual Abuse

BY LORI D. FRASIER AND KATHI L. MAKOROFF

ABSTRACT

Expert medical testimony in child sexual abuse cases can be critical to the outcome of a legal case. This article will review the development of the medical knowledge and clinical expertise in child sexual abuse. Since the passage of mandatory child abuse reporting laws, the forensic medical examination of a child for evidence of sexual abuse has become standard. Until recently, many myths regarding female genital anatomy existed but were based primarily on dogma and lack of empirical research. Over the past 25 years, many research studies and accumulating clinical evidence have expanded medical knowledge and debunked old myths. Physical evidence, even in cases of alleged genital or anal penetration is rare. Sexually transmitted infections are also uncommon and often require medical interpretation as to their significance in a prepubertal child. Specialized medical knowledge, training, and clinical expertise have developed in order to evaluate children presenting with allegations of sexual abuse. Such medical expertise provides invaluable service to courts. We review criteria for evaluating such expertise in light of current medical practice.

INTRODUCTION

Judges are frequently asked to render decisions in cases involving allegations of child sexual abuse where medical evidence is presented. Judges are the triers of fact in bench trials, and most juvenile and family court hearings are such proceedings. Judges also have a responsibility as "gatekeepers" in admission of the testimony of "experts" who render medical opinions. This article will review a historical perspective of child sexual abuse and current medical literature, and address medical expertise and expert testimony as they relate to evidence presented in child and adolescent sexual abuse cases.

Historical Perspective

In order to place the medical evidence in perspective and to interpret testimony from various medical experts, it is important to understand the evolution of the medical field of child abuse as it relates to child sexual abuse.

The medical community's recognition and understanding of child abuse has come full circle. In the 1850s, a French pathologist, Ambroise Tardieu, published several treatises on physical abuse of children and sexual injuries resulting from rape. His description of various forms of child abuse was exceedingly accurate, even by today's standards. Dr. Tardieu's writings were largely ignored by the medical community of his time (Labbe, 2005).

The actual prevalence of child sexual abuse was not known until the late 1960s when the reporting of suspected child abuse was mandated in all 50 states. Mandatory reporting of child abuse allegations by certain designated professionals provided a means of measurement of the extent of the problem in society. However, through early microbiological methods and the recognition of venereal transmission of certain bacterial agents, medical historians have provided a window into the scope of the issue. The bacterium *Neisseria Gonorrhea* was discovered in 1879 by Albert Neisser. Because it

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TABLE 1
Sexual/Anatomical Myths (all of the following are false)

- Girls can be born without a hymen.
- The hymen can be injured through sports, horseback riding, or gymnastics.
- An injured hymen never heals.
- A doctor can always tell if a girl has been vaginally penetrated.
- The hymen is always broken during intercourse (consensual or not).
- Masturbation injures the hymen.
- Anal penetration often leaves scars or laxity of the anus.
- A large vaginal opening indicates sexual penetration.
- Sexual intercourse always tears the hymen.

was isolated from genital infections, the sexual nature of the disease when it appeared in adults was not questioned. However, the medical community had a much more difficult time when preadolescent children were diagnosed with gonorrhea. In the early part of the 20th century, vaginitis in prepubertal girls was mostly caused by gonorrhea and considered "innocent" in origin.

Parallel events in the latter 20th century coincided to lead to medical awareness of the reality of child sexual abuse. In 1978, C. Henry Kempe published "Sexual abuse, Another hidden pediatric problem" (Kempe, 1978). Some physicians took note of this in the context of pediatric gonorrhea. Dr. Suzanne Sgroi argued in 1979 that gonorrheal infections in children were the result of sexual contact (Sgroi, 1979). However, the medical community was slow to accept this premise. A prominent pediatric gynecology textbook published in the early 1980s continued to espouse the concept that gonorrhea could be transmitted in nonsexual ways and stated that gonorrhea "in a premenarchal child may be acquired through voluntary intercourse" (Huffman, Dewhurst, & Capraro, 1981, p. 133). The study of childhood gonorrhea and an acceptance that it was a sexually acquired infection, paralleled the "discovery" of child sexual abuse in America during this period.

As sexual abuse allegations were being investigated more thoroughly by social service and law enforcement agencies, these agencies turned to physicians who began to be presented with children to be examined for physical evidence. Although the understanding of how children disclose or report such abuse was still emerging, and because a child's allegation was all that stood against an adult denial, it seemed that physical evidence of sexual contact, documented by a physician, would be critical evidence in the determination of fact in such cases.

The reality in medicine was much different. A tremendous mythology existed regarding female genitalia, especially the hymen. There was a general lack of understanding about the nature of child sexual abuse among medical professionals, and a marked lack of medical knowledge regarding "normal" anatomy of the prepubertal child. Doctors were asked to evaluate alleged child victims with virtually no training, literature, or research base. They were then expected to render an opinion that had the weight of science, but was in reality based upon myth and dogma. Table 1 lists common "myths" regarding anogenital anatomy and sexual abuse.

Research into the area of anatomic changes resulting from sexual abuse in children, especially girls, began to reshape medical knowledge and launched additional research which served as the early beginnings of a new subspecialty of pediatric medicine. Dr. Hendricka Cantwell examined young girls at a shelter where they were sent when removed from their homes for allegations of abuse or neglect (Cantwell, 1983). When examining their genitalia, she measured the width of the hymenal orifice, comparing this parameter to that of girls who were admitted to the shelter for reasons other than sexual abuse. Girls who allegedly had been sexually abused had, on average, a hymenal orifice greater then

4mm, and those who apparently had not been sexually abused had less than 4mm. The "4mm standard" was born, and was used by pediatricians to "prove" that a girl had been vaginally penetrated. This concept even lingers today. These first researchers were pioneers, and although their early conclusions have subsequently been disproven, it was a first attempt at applying empiricism to a subjective assessment.

The next advance in the field would change the landscape forever. Woodling and Heger adapted a tool of gynecology, the colposcope, and began evaluating children for physical evidence of sexual abuse (Woodling & Heger, 1986). This instrument was initially developed to evaluate the uterine cervix of adult women for abnormalities. A Brazilian physician had suggested it may be used in evaluating injuries resulting from rape in adults (Teixeira, 1981). The colposcope provided an excellent light source and magnification, and could be fitted with a 35mm camera. The colposcope could be focused noninvasively on the external prepubertal genitalia or the anus, resulting in photographs of astonishing quality and detail. However, because prepubertal anogenital anatomy had never before been evaluated in such magnified detail, anatomic findings never seen or described previously became ascribed to be the result of the alleged sexual assault. This was well demonstrated in 1987 in a study by Ladson, Johnson, and Doty (1987). More than one hundred physicians were shown photographs of prepubertal female genitalia and were asked to identify the structures. When shown these magnified images, over 40% of the physicians could not even correctly identify the hymen.

In another study, Jenny and colleagues answered a common clinical and legal question: Could girls be born without hymens? Dr. Jenny relates that this study was born of a defense attorney's question regarding this issue and realized that the medical literature had not rigorously addressed this fact. She examined more than 1,100 newborn girls in a hospital nursery and clearly determined that all females have a hymen at birth (Jenny, Kuhns, & Arakawa, 1987). A concurrent study from Israel evaluated 25,000 newborns and had similar conclusions to the Jenny study (Mor & Merlob, 1988). Sixteen years later and despite strong evidence to the contrary, medical and legal professionals continue to espouse the concept that "girls can be born without a hymen."

If a child truly has no hymenal tissue, and no medical reason to account for this (such as surgery), it is presumed the hymen has been destroyed through traumatic vaginal penetration. Additionally, more data emerged that suggested even the most intrusive forms of sexual abuse may not leave physical sequelae. Muram correlated perpetrator confessions with children's histories. These studies suggested that in cases when the child and perpetrator both reported vaginal penetration, the examination could still be entirely normal, with no findings of genital trauma. This was even true in one case when the child was examined within a few hours of the assault (Muram, 1989). Explanations for this finding include the possibility that the hymen and vagina stretch to accommodate vaginal penetration in some cases or that only partial or "labial" penetration occurred.

The 1990s was the era of explosive research. Several studies demonstrated that hymenal diameter was not a reliable indicator of abuse (McCann, Voris, Simon, & Wells, 1990; Berenson, 1994; Berenson, Heger, Hayes, Bailey, & Emans, 1992). McCann's studies of anal and genital anatomy in nonabused girls and boys demonstrated that many previous anatomic findings being reported were found in nonabused children and therefore could not be considered to be the sequelae of sexual abuse (McCann, Voris, Simon, & Wells, 1989; McCann, Wells, Simon, & Voris, 1990). Berenson confirmed McCann's studies through her tracking of the normal development of the hymen from birth through childhood. Her studies of infant girls described tremendous variation of hymenal findings. She also proved that the female hymen went through natural developmental changes from birth through adolescence (Berenson, 1995; Berenson & Grady, 2002).

As methodologies improved, research defining normal anatomy of nonabused children to abused children emerged. Case studies of children with fresh genital injuries clearly resulting from sexual assault allowed understanding of the healing process (McCann, Voris, & Simon, 1992). Severe injuries usually result in scarring of the tissue in sometimes obvious ways. However, if minor tears or superficial injuries occur, the genital and hymenal tissues appear to heal without scarring or residua. Most child sexual abuse, being intrafamilial, was not of the type that led to severe injury. Physicians interested in child sexual abuse came together with

their colposcopic pictures, case histories, and newly published papers. During this decade, common terminology and clearer definitions of "normal" anatomy began to evolve. The development of a "Classification System" based upon studies and case reports has been an attempt to bring some organization to the process (Adams, 2001). The most experienced clinicians who had interviewed and examined thousands of children in the context of sexual abuse allegations almost uniformly began to advocate a position that most girls would have completely normal genital examinations despite a clear history of genital contact or even penetration. Anal anatomy in girls and boys was also nearly always normal. Acute and residual injuries to the penis were also very rare and rarely reported.

Another important area of research was how physicians' experience in examining children affected their analyses of physical findings. Several studies were published that compared experienced with less experienced examiners. In one study, a less experienced examiner would "change" his or her opinion of a finding if the history or the nature of sexual contact changed (Paradise, Winter, Finkel, Berenson, & Beiser, 1999). Lack of experience in child sexual abuse cases would result in "over-interpretation" of a normal anatomic finding (i.e. misinterpreting a normal variant as the result of abuse). More experienced examiners understood the concept that a normal examination could be consistent with the diagnosis of sexual abuse in the face of a reliable history from the child.

Makoroff and colleagues studied the ability of pediatric emergency department physicians to assess genital findings in cases where sexual assault was alleged (Makoroff, Brauley, Brandner, Myers, & Shapiro, 2002). The emergency department physicians' findings were compared to those on follow-up examination by a "trained child abuse pediatrician." Forty percent of the time, the emergency department physician was wrong in his or her determination of evidence of sexual abuse. This was not a new concept. In 1978, a study showed that sexually abused children who presented to an emergency department were found to receive less than adequate medical care than children who presented with ear infections (Orr, 1978). Twenty-seven years later, despite better recognition of sexual abuse, improved training, and many published studies, abused children are still not receiving adequate care in our emergency departments when seen exclusively by emergency department physicians.

Current Findings

Current literature now supports the fact that the majority of male and female children and adolescents who give a history of sexual abuse have no evidence of anal or genital injury on physical examination. Three possible reasons for this are:

- Many children do not disclose a history of sexual abuse until months or years following the abuse. Because of the time delay, if genital or anal injuries were sustained, they may have healed.
- Most types of child sexual abuse do not involve a great amount of physical force by the perpetrator. Therefore the acts, although abusive, may not damage the genital or anal tissues.
- The genital and anal tissues may not injure readily with physical contact. If they are injured, studies have demonstrated that they can heal completely with little or no sign of previous trauma.

Recently, studies looking at larger samples of patients have highlighted the fact that the number of abnormal examination findings in young children and teenagers who give a history of sexual abuse is very low. Berenson examined preadolescent girls who gave a history of sexual abuse that included genital penetration and compared them with girls who were carefully screened for abuse and found not to have been abused. Only 4% of girls alleging penetration had abnormal genital examinations (Berenson et al., 2000). This study also demonstrated very clearly that many findings on genital examination that may have been previously felt to be the result of abuse, were seen equally in abused and nonabused girls. In 2002, Heger and her colleagues demonstrated that in 2,384 boys and girls who were being evaluated for possible sexual abuse, over 96% had normal examinations (Heger, Ticson, Velasquez, & Bernier, 2002). The article makes the statement that "medical, legal, and social professionals rely too heavily on the medical examination." Finally, Kellogg examined 36 pregnant adolescents. Only 6% (2/36) had definite findings of penetrating genital injury on physical examination (Kellogg, Parra, & Menard, 1998).

It is important that all medical as well as nonmedi-

TABLE 2
Significance of Sexually Transmitted Infections

Infection	Significance in Relation to Sexual Contact
Gonorrhea	Definitive*
Chlamydia	Definitive*
Syphilis	Definitive*
Trichomonas Vaginalis	Very likely*
Human Immunodeficiency Virus	Definitive if other risk factors ruled out*
Herpes Simplex type 2	Possible*
Human Papilloma Virus (genital warts)	Possible
Bacterial Vaginosis	Inconclusive

* Infection can be transmitted from mother to infant during birth or prior. Sexual contact can be presumed if perinatal transmission is eliminated.

cal professionals involved in a child sexual abuse case understand that a child's credible history of sexual abuse should not be discounted because the child has a normal genital examination. The diagnosis of sexual abuse is rarely made on the basis of the physical examination findings alone.

What is Evidence?

Several studies have documented the presence of injury due to sexual abuse in children and adolescents (McCann, 1998; McCann, Voris, & Simon, 1992; McCann et al., 1989). These studies document that fresh or acute injuries can heal completely, or if they are severe, may result in scarring of the hymen or anus. Follow-up examinations demonstrate how such injuries may heal. An understanding of the healing process is important when children present weeks to years after the assault. If a child is seen within the first three days after a sexual assault, injury to the genitals or anus may be seen. This may include bruises, abrasions, small lacerations, and tears. Most of these injuries heal completely without scarring. Deeper penetrating injuries of the hymen usually lead to defects in the integrity of the hymen that may only be apparent with specialized examination techniques. Anal tears also usually heal without scarring, unless the tear is deep and extensive. Such injuries often require surgical repair. Anal scars are rare, and some experts suggest that unless the examiner has observed the injury heal into a scar, extreme caution should be observed when interpreting a finding near the anus as a "scar." Penile injuries may consist of bruises, abrasions, and suction marks. These injuries also heal without residual scarring.

Forensic evidence (semen, DNA, and trace evidence), may be found in children if collected soon after an assault. A study by Christian et al. (2000) found that such evidence was not found on or in children's bodies more than 12 hours following an assault. Most evidence was found on bed linens and clothing. These authors advocated careful crime scene collections in cases of pediatric sexual assault.

Sexually Transmitted Infections as Evidence

Sexually transmitted infections (STIs) can be transmitted during sexual abuse. When a sexually transmitted infection is diagnosed in a child, sexual abuse must be considered and evaluated. An STI may be the first indication that abuse has occurred. However, like physical evidence, STIs are rare in sexually abused prepubertal children. Some STIs have a much stronger link to sexual abuse. For example, most experts agree that infections from *Neisseria gonorrhoeae, Chlamydia trachomatis*, Syphilis and Human Immunodeficiency Virus are primarily transmitted by sexual contact, and that a determination of sexual abuse should most likely be made whenever these infections are diagnosed when perinatal transmission and rare non-sexual transmission have

been excluded. However, there is widespread disagreement over the probability of non-sexual transmission of *Condyloma acuminata* (genital warts) and Herpes Simplex Virus. A recent study by Sinclair et al. suggests that many genital warts seen in young children (under the age of 13) are a result of non-sexual transmission (Sinclair, Woods, Kirse, & Sinal, 2005). This uncertainty concerning transmission creates difficulties for those who investigate abuse allegations and for those who are mandated to protect the child. When there is such an infection but there is neither physical sign of abuse nor any history of abuse, investigators must assess the potential risk to the child while recognizing that medical opinion may vary. Table 2 lists the most commonly encountered organisms along with the likelihood of sexual transmission.

Because of the important legal and social consequences of finding an STI in children, it is important that appropriate testing is performed. Currently, culture diagnosis is the "gold standard" in legal cases and in cases of possible sexual abuse. Microbiology labs handling these specimens must be certain of their results and, when necessary, carry out additional tests to guarantee that no infections are mistakenly reported. Recently, non-culture tests, specifically nucleic acid amplification tests (NAATs), have been introduced and used in the diagnosis of certain sexually transmitted infections, namely *Neisseria gonorrhoeae* and *Chlamydia trachomatis.* NAATs use an amplification method; the tests are very sensitive and can pick up even a small amount of an organism. However, these tests are not yet approved for forensic use in children. They may, however, be used as a screening test if a culture is used to confirm a positive result. Research regarding STIs in children is difficult because of the low overall prevalence of infection in this population. Cooperation between large centers is necessary to obtain the necessary numbers of children for this research. It is important that any test used to diagnose an STI in a child is both very specific and very sensitive. Missing an infection in a child, especially if it is a marker of possible sexual abuse, is a problem because the child could remain in an unsafe environment. However, an erroneous diagnosis of a sexually transmitted infection and sexual abuse could lead to the inappropriate removal of a child and inappropriate prosecution.

Experts and Expert Testimony

In court proceedings, medical experts are called upon to assist the fact finder (judge or jury) in the interpretation of medical evidence. Judges determine who is qualified to provide such interpretation. The definition of "expert" is generally accepted to be someone who is qualified by evidence of his or her expertise, training, and special knowledge. While it is true that physicians in general are "experts" at the interpretation of human physical and physiological processes, there is wide variation in physicians' knowledge in specific areas. Being board certified in pediatrics does not make a physician a child abuse expert. As noted earlier, a recent study of chief residents in pediatric training programs demonstrated deficiencies in these physicians' ability to identify basic prepubertal genital anatomy (Dubow, Giardino, Christian, & Johnson, 2005). Training, and board certification in Obstetrics and Gynecology does not give a physician the specific knowledge required to evaluate child sexual abuse cases unless the training included curriculum in that area (Muram, Jones, Hostetler, & Crisler, 1996). It would be erroneous for a court to consider the two specialties as equally qualified or to give more weight to an OB-GYN physician thinking he or she is an expert in all aspects of genital anatomy. Specialized training or extensive clinical experience, accompanied by ongoing continuing medical education in the field of child sexual abuse should be prime factors in judicial determination of experts' qualifications.

Chadwick and Krous (1997) point out that responsible and appropriate experts in child abuse and neglect cases should have:

1. General training and experience in the cause of injuries to children;
2. Specific training, education, or experience as to the particular type of case before the court;
3. Memberships in relevant medical and professional societies;
4. Child abuse and neglect conference presentations or at least attendance; and
5. Relevant professional publications.

Those experts whom they consider "irresponsible" tend to:

1. Lack qualifications to support the opinions being offered in court;

2. Offer unique theories of causation of injuries that are contrary to the vast medical literature and the consensus of opinion among those who work with children;
3. Express unique interpretations of the findings unsupported by medical science;
4. Misquote the medical literature or misunderstand the science underlying that literature; and
5. Offer blatantly false statements either about the science or their qualifications (Chadwick & Krous, 1997).

Many courses are given annually throughout the country, and any professional who purports to be an expert in the courtroom should be able to enumerate specific training courses he or she has received. Many experts also serve as lecturers either locally, regionally, or nationally in the field, and such participation should be considered. Any professional not actively engaged in the field seeking to be admitted as an expert should have had recent training. Because medical knowledge changes rapidly, failure of the expert to remain current should be weighed negatively.

Other medical professionals such as Nurse Practitioners, Advance Practice Nurses, and Physician's Assistants may be admitted as experts to assist the court. For such professionals, determination of their advanced training in diagnosis and treatment of medical conditions is also important. For example, Sexual Assault Nurse Examiners may have very extensive specific training in the area of child sexual abuse but may not hold an advanced degree (RN only). These professionals have specialized skills in collecting evidence, interviewing victims, and providing initial crisis counseling. They provide a tremendous service to the court. However, their limitation in general training in diagnosis and treatment of medical conditions may not have given them the depth of understanding of the process of differential diagnosis (for example, analysis of alternative diagnostic possibilities for a medical finding).

Knowledge of the literature through reading medical articles and interpreting that literature is also the responsibility of the expert. However, such knowledge alone does not provide a broad perspective into the field of child sexual abuse. Physicians or other medical professionals can become quite knowledgeable in a certain field through in-depth reading of the medical literature, but that would not qualify them to practice or be credentialed in that field. Additionally, no single treatise in the vast medical libraries constitutes complete or exclusive knowledge in the field. Publication of a study or review does not make it authoritative. Peer review of medical literature ultimately occurs at the level of the readership. A published study may not withstand later scrutiny, or it may rise to the level of an important contribution to the field. No single study changes the practice of medicine, nor should a single study be the authoritative treatise that the medical evidence hangs on. Medical expertise and the admissibility of that information should be based upon the manner in which medicine is practiced in the current year. Expert medical testimony can be pivotal in the outcome of a case. Testimony that is soundly based in current medical knowledge, including clinical experience and knowledge of the literature, provides important assistance to the court.

Documentation and Oversight/Peer Review

The colposcope has been a tool utilized in evaluating sexually abused children for nearly a quarter of a century. With photographic, video, or digital imaging, the ability to provide high quality interpretable images is unquestioned. As early as 1988, strong recommendations were published regarding the need for quality photodocumention (Ricci, 1988). Except under specific circumstances where children or adolescents refuse imaging, every examination should be recorded in some manner. There is no other way to preserve the evidentiary quality of the examination, allow for peer review of examinations, and allow the opposing counsel to obtain their own expert review. Medical professionals must be open to this type of scrutiny if quality examinations and fair analysis of medical findings are to be accomplished. Legal protections should be in place to preserve the confidentiality of these most sensitive images, but that should not prevent quality review of examinations. Adams attempted to evaluate the analysis of images by level of clinical experience (Adams & Wells, 1993). A higher level of experience (i.e. more exams per month and the use of the colposcope) was associated with overall higher agreement between experts.

Every examiner should have a method for oversight and peer review whether onsite or via a secure tele-

medicine program. This is especially true for programs that do not have specialty-trained physicians. Abnormal examinations carry the weight of evidence, and in the minds of juries or judges could provide the proof of a crime that could lead to the separation of families and incarceration of defendants. The risk of a "false positive" cannot be overestimated. Medical practitioners can easily state that a normal examination does not preclude the possibility of sexual abuse, leaving a final determination to other aspects of the investigations. However, clear injury that could only be caused by genital or anal penetration stands nearly alone. A case should not be lost or won because an inexperienced or less knowledgeable medical examiner did not interpret findings in light of current medical literature. For example, a professional may state that the child appeared "too large" or invoked the 4mm rule, notwithstanding the 15 years of studies that have refuted this data. Many terms and descriptions of genital anatomy have come and gone, and only the most current studies should be applied to any case, regardless of the date it was evaluated.

Conclusion

Child sexual abuse is a relatively new concept in modern medicine, and there has been a great deal of evolving literature written on the subject over the past three decades. Medical assessment of children who may be sexually abused is not just for forensic purposes, i.e. to determine if the child was abused. Medical findings are rare, sexually transmitted infections are rare, but children and families need to be reassured regarding the importance of a normal examination. Judges and courts may also utilize medical expertise during the litigation of a case. Medical experts can be utilized effectively to discuss the significance of a normal examination in light of a compelling history of sexual contact. Important physical findings, or STIs when present, can be explained by the medical expert and provide probative evidence to the court. Such experts should be knowledgeable regarding the current state of the science, and have recent training and clinical experience in order to be able to accurately present this critical information to the courts. Oversight and expert review of cases is essential in order to ensure that medical findings are interpreted in the most accurate manner possible.

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Children Exposed to Domestic Violence: Making Trauma-Informed Custody and Visitation Decisions

BY PATRICIA VAN HORN AND BETSY MCALISTER GROVES

ABSTRACT

This article explores the risks for young children and the challenges for courts that emerge when parents who are victims or perpetrators of intimate partner violence seek court decisions on child visitation or custody matters. We focus particularly on children age five and younger, a group that is disproportionately represented in families affected by intimate partner violence, and especially vulnerable to its traumatic impact. We examine the literature on children's response to violence between their parents and the literature on parental alienation, a counter-charge that may arise when one parent alleges violence as a reason to limit the other parent's access to the children. We look at challenges faced by both mental health professionals and courts involved in custody determinations and make policy recommendations to help courts make trauma-informed decisions that best serve children.

Sam's mother said that Sam's father first hit her during her pregnancy with Sam, that the violence continued as Sam grew, and that Sam witnessed many of his father's assaults. Sam and his mother twice went to live in a domestic violence shelter, but returned home after a few days. Sam's mother described him as a distressed, frightened, angry child who had difficulty sleeping, whether he was in shelter or at home, with nightmares that disturbed his sleep every night. He protested and cried whenever she took him out of the house, and he was terrified whenever he was separated from her. When he heard adult voices arguing, even on the television or in the street, he covered his ears and cried. When his father became angry or loud, Sam ran to his mother and clung to her, crying, "No, daddy! No!" At the same time, he was often aggressive with his mother, hitting and kicking her whenever he was even slightly frustrated. When Sam started preschool at age four, his problems increased. He cried for his mother and seemed inconsolable without her. He could not sit still and concentrate during quiet activities. He was aggressive with peers, and when the teacher intervened, Sam became aggressive with her. In less than two months, the preschool asked Sam's parents to find another place for him. The teacher said that she could not manage Sam's behavior.

Sam's mother, distraught over the impact that the violence in his home was having on the child, moved once again to a shelter and sought a restraining order. Sam's father opposed the restraining order and sought full legal and physical custody of Sam. He denied any violence, citing the absence of police reports or medical reports to substantiate his claim. He also said that Sam's behavior was normal and that Sam's mother exaggerated any problems that Sam might have. He asserted that Sam's anxiety and fearfulness was due to his exposure to a "crazy mother who is doing her best to

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poison my child's mind against me." He told the court, "There's nothing wrong with Sam except that he's confused. His mother has lied to him for so long that she has him believing that I'm dangerous. I love Sam. I would never hurt him."

What are courts to make of cases like this where the parents disagree so dramatically about what has happened between them and whether their conflicts have had a negative impact on their children? Judges making decisions in cases like Sam's are faced with conflicting sets of value and precedent. On the one hand, they are charged with protecting the best interests of children (Uniform Marriage and Divorce Act, 1974). When the family is functioning well, preservation of that family will meet the child's developmental needs (Goldstein, Solnit, Goldstein, & Freud, 1996). The best interest standard asserts that when the family fails in its functioning, as in abuse or abandonment, or when separating parents cannot agree about custody and visitation, the child's interests should be paramount (Solnit & Nordhaus, 2005). On the other hand, a long line of judicial authority has established that parents have a constitutional right to the care, custody, and control of their children, and that this includes the right to be free from governmental interference in child-rearing decisions, as long as parents fulfill their obligations to care for their children's health, safety, education, and welfare (Guggenheim, 2005).

We argue that in balancing these competing values and legal precedents, courts should acknowledge that in cases where there are findings of intimate partner violence (commonly referred to as domestic violence), violent parents may not be adequate protectors of their children's legal and safety interests. These cases may require court intervention to assure that offending parents' contact with their children is safe and that they get the intervention they need to help them change their destructive behavior patterns. Most states provide for some consideration of a history of domestic violence as a factor in making decisions about child custody and visitation, and some states have gone further and established a rebuttable presumption that it is in the best interest of the child that a spousally abusive parent not receive full or joint custody (Kernic, Monary-Ernsdorff, Koespell, & Holt, 2005). In cases of established domestic violence, decision making about children involves competing and conflicting needs: their need to maintain safe contact with both parents weighed against their need to be protected from the ongoing negative impact of trauma on their development. We further argue that if the court takes a view of the impact of domestic violence on children that is truly trauma-informed, it will acknowledge that the effects of domestic violence do not stop when the parents separate. Children may continue to witness violence at times of custody exchange or between the violent parent and a new partner (Shepard, 1992). But even in cases where children's exposure to physical assault ends with the separation of their parents, the initial trauma and its sequelae will continue to reverberate in the children's development, often changing their developmental trajectories for the worse. By making custody and visitation decisions that are truly trauma-informed, courts can help protect children from these continuing risks to their development.

Negative Impacts of Domestic Violence on Children

Although a full review of the literature discussing the effects of violence exposure on children is beyond the scope of this article, it is now well established that witnessing violence in their homes is associated with adverse outcomes for most children (Groves, 2002; Kitzmann, Gaylord, Holt, & Kenny, 2003; Carlson, 2000; Rossman, Hughes, & Rosenberg, 2000; Edleson, 1999; Margolin, 1998; McCloskey, Aurelio & Koss, 1995). Children exposed to violence between their parents have more internalizing (withdrawn, anxious, and depressed) behaviors and more externalizing (aggressive and destructive) behaviors than do controls (Carlson, 2000; Rossman, et al., 2000; Holden & Ritchie, 1991). They are at risk for insecure attachments to their caregivers, particularly if they are young (Lieberman & Van Horn, 1998). A substantial number of children exposed to violence between their parents are likely to develop post-traumatic stress disorder (Kilpatrick, Litt, & Williams, 1997; Kilpatrick & Williams, 1998; Lieberman, Van Horn, & Ghosh Ippen, 2005). Children's cognitive development is at risk as well. One well-designed study of 5-year-old twin pairs established that children exposed to high levels of domestic violence had IQs that were eight points lower than those of

non-exposed children (Koenen, Moffitt, Caspi, Taylor & Purcell, 2003). Children who come from homes where there is adult partner violence are also at higher risk for physical abuse, exposing them to the trauma of direct victimization, as well as to the trauma of witnessing injury or threats against a parent. (Appel & Holden, 1998; McGee, Wolfe, & Wilson, 1997; O'Keefe, 1994).

There is some evidence that exposure to violence between their parents has a disproportionately strong impact on children under five (Kitzmann, et al., 2003; Fantuzzo, Brouch, Beriama, & Atkins, 1997). In a group of children four years old and younger, children who witnessed assaults against their primary caregivers had more symptoms of aggression, fear, and hyperarousal than children who suffered other kinds of traumas, including direct physical and sexual assault (Scheeringa & Zeanah, 1995), demonstrating that for these very young children witnessing assault on caregivers is indeed overwhelming and traumatic.

Children may suffer indirect effects because of the parenting style of their violent parents. Bancroft and Silverman (2002) suggest that, in addition to the damage that violent parents do to their children by frightening them, being poor role models, and possibly assaulting them directly, batterers undermine the other parent's authority and relationship with the children, making it difficult for children to rely upon that relationship to help them recover from the effects of violence.

A Developmental Model of Trauma

If, however, courts are to make custody decisions truly informed by trauma theory, custody evaluators, guardians *ad litem,* and judges must understand far more than the simplistic principle that witnessing violence between their parents is bad for children. They must understand the impact of traumatic life experiences on the child's developing mind and personality, and the ways these experiences reverberate in the lives of the child and those who care for the child. Pynoos and colleagues describe a developmental model of the impact of trauma that demonstrates clearly that a traumatic event is only the beginning of a chain of impacts that may be experienced across the developmental span of childhood and adolescence (Pynoos, Steinberg, & Piacentini, 1999).

At the time of the initial trauma of hearing or seeing one parent assault the other, children's feelings of fear and horror are accompanied by an intense wish to turn to those who usually protect them: their parents. Because they cannot turn to their parents in this moment of crisis, an unsolvable conflict arises for children, and they are left alone with unmanageable feelings of terror (Osofsky, 1999). These feelings are accompanied by activation of their central nervous systems resulting in a cascade of stress hormones (De Bellis et al., 1999). The effect of this surge of stress hormones is hyper-alertness; children are ready to fight or flee from harm and are attuned only to self-protection. If this chain of events happens too often, it can result in permanent changes in the way the child's mind and body process stressful cues, such that even mildly stressful events are perceived as threatening (De Bellis et al., 1999). This state of hyperarousal and hypervigilance affects a child's cognitive, emotional, and social development. If children are reminded of the original assaults, or if they experience new assaults, a similar stress response occurs, leaving child witnesses at risk for constant states of agitation (Pynoos et al., 1999).

Domestic violence is a trauma that fits this model of repetitive surges of stress hormones. Losses that follow domestic assaults (for example, the separation of the family, the need to change schools, the loss of home, friends, and familiar patterns) present children with new challenges to their development. When one parent uses intimidation and violence or the threat of violence to exert control over the other, the family lives in a state of trauma and turmoil. Children are subject to repeated stress and ever-broadening networks of traumatic reminders. They may live in constant states of fear and anxiety, and their anxiety is heightened whenever they are reminded of the violence they have witnessed.

In the case of Sam, described above, his mother's description of his behavior illustrates children's complex response to violence in their homes. Unable to get the violence that he witnessed out of his mind, he responds with fear and anxiety to a variety of reminders. Because he is afraid that his mother may be injured or killed, his fear of being separated from her is overwhelming. Because leaving home has sometimes meant stays in strange, confusing shelters, Sam is now afraid to leave his home for fear that he will not come back. When events in his life arouse these fears, he becomes

restless, irritable, and aggressive. His sleep is disturbed, he has trouble concentrating, and he has few strategies besides aggression for dealing with frustration. His development is at risk not only because of the initial trauma of witnessing violence. His hyperarousal, fearfulness, and aggression make it difficult for him to succeed at many of the ordinary developmental tasks of early childhood: exploring the world, learning, and forming relationships with peers.

Protective Factors for Children

Trauma theory also informs us about what might be protective for children like Sam. Especially for young children, secure relationships with a caregiver can protect them from many of the emotional and behavioral problems that follow trauma (Pynoos et al., 1999; Lieberman, Van Horn, & Ozer, 2005). Young children use their relationships with attachment figures to regulate their emotional responses in times of fear or stress, to help them cope with their negative feelings, and to help them learn adaptive ways to calm and regulate themselves (Lieberman, 2004). When a child has suffered a trauma, precisely these capacities are threatened (Lieberman, 2004; Groves, 2002; Pynoos et al., 1999). Considering these findings, the custody arrangement that may be most protective of young children's development after the trauma of witnessing domestic violence is one that places them with the non-offending parent so that the child is able to use the restorative power of the attachment relationship to regain equilibrium. Such an arrangement may include carefully controlled access to the offending parent. This plan allows children protection from reminders of violent traumatization that may be associated with the offender; it also allows children to begin to restore their sense of the non-offending parent as a reliable and protective caregiver. Young children's mental health is dependent upon consistent, reliable caregiving. Supporting traumatized children's secure relationships with caregivers gives them, therefore, support in re-regulating their affect, and learning more adaptive coping strategies.

In families with documented domestic violence, opportunities for the children to have safe contact with the offending parent may be important. In one study of preschool children whose parents had separated after at least one incident of father-to-mother domestic violence witnessed by the child, children who had weekly contact with their fathers suffered fewer symptoms of depression, as reported by their mothers, than did children with no contact with the father, although the type of contact did not seem to make a difference. Children who had weekly supervised contact with their fathers also were protected from symptoms of depression (Stover, Van Horn, Turner, Cooper, & Lieberman, 2003). This study has limitations, including a small sample size, but it demonstrates the centrality of attachment relationships in the lives of very young children. Even when fathers have been violent and frightening, continuing contact with them, where that can be accomplished safely, may help protect their young children from feelings of sadness and loss.

Dilemmas for the Court When the Facts of Domestic Violence are Unclear

In some cases the history and extent of domestic violence are well documented in prior arrests, probation records, restraining orders, and victims' medical records. Other cases, such as the case of Sam, are neither simple nor one-sided. Although the mother alleges ongoing domestic violence witnessed by the child, and the child's behavior is consistent with a trauma response, the father tells a different story. He denies violence and asserts that the mother is exaggerating the child's problems. There are no police reports or medical documentation as accompanying evidence of the domestic violence.

In all but the most egregious cases of domestic violence, it can be very difficult for the courts to determine the facts of the allegations and the extent to which a child has been traumatized. Trauma-informed decision making does, however, require that courts take allegations of intimate partner violence seriously and devote the resources necessary for a thorough investigation of whether or not the allegations are true. These questions can best be addressed with a thorough evaluation provided by a professional who is knowledgeable about child development, family law, child trauma, and domestic violence. However, these resources are scarce and expensive in many court settings. In the absence of these resources, it is also possible for the judge to identify evidence that the parties' attorneys must pro-

duce, or in the case of pro se litigants, to ask the parties directly for information that will help determine the extent of child exposure and the basic questions about safety. The reader is referred to the National Council of Juvenile and Family Court Judges' publication, *Navigating Custody and Visitation Evaluations in Cases with Domestic Violence: A Judge's Guide*, an excellent resource to assist judges in determining which cases require an evaluation, what the content of the evaluation should be, who the evaluator should be, and what to do if there are no resources for evaluations. The publication is available from the NCJFCJ by e-mailing fvdinfo@ncjfcj.org.

Trauma-informed Risk Balancing in Complex Cases

Trauma-informed decision making about child custody does not imply that courts should treat all allegations of domestic violence as equally harmful or credible. If the court does determine that intimate partner violence has occurred, trauma-informed decision making requires two additional analytic steps, both of which consider the child's level of trauma, as well as safety. First, the court should understand the level of violence to which the child was exposed (by seeing the incident, hearing it, or being affected by its aftermath). Although any level of violence can be disturbing for a child, exposure to severe or repeated violence is more likely to leave children traumatized (Pynoos et al., 1999).

Second, the court should assess the perpetrator's risk of escalating violence or future serious violence that may put the child or the non-offending parent's ability to care for the child at risk. Several instruments exist that can be used to assess risk of recidivism in cases where partner assault has been established. One of these, the Ontario Domestic Assault Risk Assessment (ODARA) is an actuarial assessment that has demonstrated strong effectiveness in predicting re-assault (Hilton et al., 2004). It is designed to be completed by investigating police officers who are trained to complete the measure by coding data drawn from criminal databases. Its direct utility by courts is limited because courts may not, in family law cases, have access to arrest databases. The ODARA, however, does have value in helping courts understand what risk factors are associated with especially high risks of re-assault. Variables with the highest weights and, therefore, the most predictive value, in the ODARA include history of prior domestic assault; a past sentence of 30 days or more for any kind of assault; prior violation of bail, parole, probation, or no-contact orders; the presence of more than one child in the home; and the offender having more than one indicator of a substance abuse problem. Other structured screens for violence are available, including the Danger Assessment (Campbell, 1986), and the Spouse Abuse Risk Assessment (Kropp, Hart, Webster, & Eaves, 1995). These measures were not actuarially created, as was the ODARA, but rather were developed by selecting variables demonstrated by the empirical and clinical literature to distinguish domestically violent men. Sheeran and Hampton (1999) propose a risk assessment screening tool that can be used in courts and in visitation centers that contains many of the same variables as do the Danger Assessment and the Spousal Assault Risk Assessment. Factors for which they recommend screening include:

- Escalation of violence, especially physical violence
- Recent acquisition of a weapon or change in use of weapons
- Suicidal or homicidal ideation, threats, or attempts
- Change in substance use/abuse patterns
- Stalking
- Obsessive jealousy of or preoccupation with the non-offending parent
- Violent behavior that is tied to mental health problems
- Violent or criminal behavior outside the family
- Increase in personal risk-taking by the offending parent
- Imprisonment of the non-offending parent in the home
- Symbolic violence, including destruction of the non-offending parent's pets or property
- The non-offending parent's attempt to flee the offending parent, or to terminate the relationship

These empirically derived screens do not have the same predictive strength as an actuarially created instrument such as the ODARA. On the other hand, they provide a structure for information gathering that has been

demonstrated to be moderately effective in predicting re-assault, and that is superior to unaided clinical judgment. If a predictive screener is administered and one or more of these risk factors is present, courts should be concerned about the possibility of future incidents of violence in which the child may be directly injured or the non-offending parent severely injured or killed. Higher numbers of factors present generally indicate a higher risk. Trauma-focused decision making about custody or visitation implies that the court should use this information to protect children from such escalating risk by making orders that limit the offending parent's access to the other parent and require that contact between the offending parent and the children be monitored and supervised.

The Question of Parental Alienation in Domestic Violence Cases

The case of Sam raises another issue: possible parental alienation. Sam's father asserted that Sam's mother lied to Sam about his dad and convinced him that his dad is dangerous. A more direct assertion of parental alienation would be hard to conceive. Gardner (1985, 1992, 2002) refers to parental alienation as a syndrome in which one parent, typically the mother, consciously "programs" the child by claiming that the other parent is mean, abusive, and unloving toward the child resulting in the child becoming adamant that he or she does not want any contact with the alienated parent. Although a full review of the literature regarding parental alienation syndrome is beyond the scope of this article, the syndrome has met with criticism both in academic circles and in the courts. It has not been classified as a diagnosis in the accepted psychological diagnostic manual (American Psychiatric Association, 2000). It has been attacked as lacking empirical support and peer review, and as being based solely in the author's anecdotal clinical experience and, as such, not meeting the standard for scientific evidence established by the Courts in *Frye v. U.S., Daubert v. Merrell Dow Pharmaceuticals,* and *Kumho Tire v. Carmichael* (Williams, 2001).

Although these are important critiques, there is an additional risk associated with applying theories of parental alienation in cases where family violence has occurred, and this risk exists whether the violence was directed against a parent or against a child. In such cases, non-offending parents can be placed in an impossible bind. If they do not object to unsupervised contact between a violent parent and the child, they are seen as failing to protect the child. If they do raise objections, they may be accused of alienation (Schultze, 1997). We recommend that a court wishing to make a trauma-informed custody or visitation decision in a case where it is convinced that violence has actually occurred not accept evidence of parental alienation against the non-offending parent. Parents' efforts to protect children from potential harm in these cases should not be treated as a form of alienation, but rather as evidence of their efforts to protect the child.

Using the Assistance of Mental Health Professionals in Domestic Violence Cases

Given the complexity of contested custody cases involving allegations of domestic violence, courts often turn to mental health professionals to provide information to assist in decision making. Clinicians may be asked for their opinion of the child's best interest as part of the custody evaluation; they may also be asked to testify in court about the child's experience. They may also have relevant information about the child's experiences and their impact on the child's development that will help the court to make a trauma-informed decision. Treating clinicians who report to the court, either directly or indirectly, have extra burdens of professionalism and responsibility, as outlined by Greenberg, Gould, Gould-Saltman, and Stahl (2001), and courts must carefully assess the evidence that clinicians offer to be sure that they meet these burdens.

First and foremost, clinicians who are treating children involved in custody disputes have the obligation to keep an open mind, to consider a number of alternative hypotheses that might explain a situation, and not to rely on information about the child from only one parent or one point of view. In some situations, it may not be possible to interview both parents. The offending parent may be unavailable or unwilling to be involved in the treatment. In these cases, clinicians must bear in mind that they are only hearing one point of view, and they should make that clear when they offer evidence. If it is not clear, the court should ask questions to establish whether or not the clinician

has interviewed both parents and/or seen the children interact with both parents. The clinician's opinion in court may be of less value if it is based on a single parental perspective.

Second, clinicians who work with children whose parents are involved in custody litigation should be aware of a broad range of literature and be able to apply it to the clinical situations with which they are confronted. Greenberg and colleagues (2001) propose that at minimum clinicians must be current in the expanding research base on children's adjustment to divorce, the impact of conflict and violence on children, children's suggestibility, child abuse and domestic violence, alienation dynamics, and children's coping. Courts should demand that professional witnesses understand these domains and take them into account in any opinions that they render.

Mental health professionals can make valuable contributions to the decision-making process, but courts must be prepared to demand a high level of open-mindedness and neutrality from them. If they are working with the parents, they must not become aligned with one parent over the other. If they serve as the child's therapist, they are the primary interpreters and advocates for the child's needs, but they must avoid aligning with one parent over the other and accepting one parent's interpretation of the child's best interest without exposing that interpretation to careful scrutiny. They must consistently advocate for the child's safety and sound development, and honestly confront the strengths that each parent brings to the child as well as the risks that each parent poses. Courts accepting evidence from treating clinicians must uphold these high standards and confront possible biases if they are to make effective trauma-informed decisions.

Conclusion

The needs of children who are traumatized by exposure to violence in their families are complex. The sequelae of this exposure to violence can affect their development for many years, and the younger the child at the time of exposure, the more profound and broad-based will be the impact on that child's development. Although there are factors in addition to child trauma that courts must weigh when making custody decisions, we urge the courts to consider the children's traumatic experiences as essential elements, so that their needs in this domain will be given the weight they deserve.

Mental health professionals can partner with the court to help bench officers understand the impact of trauma on child development, and what children need to help them achieve optimal developmental outcomes in spite of exposure to terrifying circumstances, so that the court can make custody and visitation decisions informed by these principles. In hearing from mental health professionals, however, the court must demand that they address the child's needs without being swayed by the perspective of one parent over the other.

The burden on courts in these cases is great. It is important that the judge making a decision about custody or visitation know what the child's experience has been and how the child was affected. The judge must also understand what risk factors are present that predict that the offending parent will continue to place children at physical and psychological risk by continuing to commit acts of violence. Uncovering the facts when they are contested can be costly in time and money. Proceeding without knowing the facts, however, can be costly for the child. Children who are repeatedly sent off to spend unsupervised time with parents who frighten them remain hyperaroused and anxious. Their anxiety may make it difficult for them to form trusting relationships, to regulate their emotions, and to ready themselves to learn. They may become increasingly angry with the parent who must repeatedly send them to visit someone they believe is dangerous and terrifying. There is also a cost to custodial parents, who have an increasingly difficult time seeing themselves as reliable protectors for their children when they must routinely send them into a potentially dangerous situation.

Trauma-informed decision making by the court helps parents and children avoid these painful traps. The court must analyze the facts carefully and understand: 1) to what was the child exposed; 2) how did the child react at the time; 3) how has the child functioned since the trauma; 4) what are the risks that violent patterns will continue; and 5) who is best equipped to help the child recover. Not every case of domestic intimidation and threat will be traumatic for the children involved, but courts are urged to seriously con-

sider that many of these incidents will be traumatic, and to make custody and visitation decisions in ways that prioritize the child's emotional and developmental needs above all else.

Trauma-informed decision making will stretch all of the professionals involved in a case to think and act outside their accustomed zones of comfort. It will demand the allocation of needed resources to cases in which it is possible that a child has been traumatized. It will be worth the extra effort.

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Protecting and Supporting Children in the Child Welfare System and the Juvenile Court

BY BARBARA RYAN, JUDGE CYNTHIA BASHANT, AND DEENA BROOKS

ABSTRACT

The impact of childhood trauma can be substantial and long term. Prevention of additional trauma should be the guiding principle for all professionals working with children in the child welfare and juvenile court systems. This article addresses ways these two systems can protect and support children before they enter the courtroom. This is accomplished by obtaining, sharing, and utilizing a complete trauma history on the child, as well as putting measures in place to protect against system-generated trauma. It will also address how to reduce the trauma associated with testifying using psycho-educational programs, and involving a caring, sensitive judge.

INTRODUCTION

Four years ago, 8-year-old Jenny was called by her mother as a witness in a child abuse dependency trial. As a new dependency judge, I can still remember hearing the wails outside the courtroom when Jenny was called to testify: "I don't want to go to court! I don't want to talk to anyone!" I hurriedly handed a stuffed animal to the minor's counsel and suggested she give it to Jenny. Jenny grabbed the animal but her whimpering did not subside.

"How would you like to come back into my office and see pictures of my children? They're just your age, and I have pictures of my dogs back there." My children didn't interest her, but the dogs momentarily piqued her interest, so she reluctantly agreed to be led back to my chambers, followed by a parade of adults: mom's attorney, dad's attorney, county counsel, minor's counsel, social worker, court reporter, and court clerk.

There I explained the rules of testifying. Tears began rolling down her face. "I can't answer questions. Please don't make me," she pleaded. She was a crucial witness, and I felt her mother had a right to her testimony.

In a flash of inspiration, I suggested Jenny close her eyes. I can still picture the next one and one-half hours, as Jenny answered the lawyers' questions with her eyes squeezed tight so she could not see them, clutching the slightly damp stuffed lion. I wonder if now, four years later, the trauma Jenny remembers is not that of her mother's abuse but the trauma of having to talk about the abuse in front of a half dozen strangers.

As this situation vividly illustrates, the difficulties facing children involved in the child welfare system are formidable. Children often enter the system at the most vulnerable point in their lives. Adults who work within the child welfare and juvenile court systems have the

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responsibility of reducing the risks of retraumatization for children in their care.

Children and Trauma

The majority of children who enter the child welfare system, and subsequently the juvenile court system, do so because they have experienced maltreatment, some severe enough to meet the Diagnostic and Statistical Manual IV definition of trauma (American Psychiatric Association, 2005). In most situations, a person of trust, in a caretaker or guardian role, is responsible for perpetrating the maltreatment or trauma. Enduring multiple traumas is a common occurrence for children in these systems. Generally, complex trauma is the condition of having experienced multiple types of trauma or having experienced trauma for prolonged periods (Cook, Blaustein, Spinazzola, & van der Kolk, 2003). Many types of trauma, including neglect, exposure to domestic violence, physical or sexual abuse, and abandonment might bring children to the attention of either system. As children move through the child welfare and juvenile court systems, they can be exposed to additional stressful, frightening, and emotionally overwhelming experiences, resulting in additional layers of trauma. The child welfare and juvenile court systems can also serve as vehicles for linking children to resources that can promote healing and protect against additional trauma. If the results of childhood exposure to maltreatment, trauma, and severe stressors are not addressed at the earliest opportunity, long-term consequences can occur. Felitti and colleagues have linked multiple adult health risk behaviors and coping strategies that increase the chances for poor health and even early death to childhood stressors, known as Adverse Childhood Experiences, or ACEs (Felitti et al., 1998). An understanding of how childhood trauma occurs and its impact on children, therefore, becomes necessary for all professionals who will have contact with the child. Further, when implemented, trauma-informed practices should help promote the child's healing.

Collaboration Among Team Members in Gathering and Understanding the Child's Trauma History

One trauma-informed practice involves taking a complete trauma history and sharing it with other team members. A committed team including a social worker, foster parent or guardian, therapist, and attorney, in addition to a supportive and caring judge, can be a strong force working for the recovery of the maltreated child and reducing the risk of system-generated trauma. This is especially true when these individuals work in a complementary manner and follow an individualized, client-specific plan designed to protect and support the child. A common understanding of the child's trauma history is the basis upon which a plan is constructed. Collaborative planning and willingness to benefit from each other's expertise and knowledge of childhood trauma are all necessary elements for the team's successful operation. Sharing knowledge of the child's traumatic experiences can reduce gaps in the child's history and contribute to a more complete, sensitive understanding of that history. An important element in implementing such a plan for a child is finding the time for the key players to communicate about the child and his or her unique plan.

How information on a child's trauma history is gathered and shared was the subject of a study completed by the National Child Traumatic Stress Network (NCTSN) entitled *Helping Children in the Child Welfare System Heal from Trauma: A Systems Integration Approach* (Taylor & Siegfried, 2005). This study surveyed 53 agencies in 11 communities and described a lack of consistency in obtaining a complete and thorough trauma history of a child involved in the child welfare system and in communicating these histories to other professionals. It was found that overall, agencies did not always receive detailed information on a child's trauma history at the time of referral. Among the agencies, there was inconsistent use of a protocol of standardized assessments to determine the existence of Post-traumatic Stress Disorder (PTSD) symptoms. There was also a lack of consistency in gathering such information within a specific agency. Not all agencies gathered information about specific details of the traumatic event, the child's involvement with other agencies, the duration of the trauma and the number of traumatic episodes. Even fewer agencies reported gathering information on the child's trauma reminders and triggers. Each of these details is significant in understanding a complete picture of the child. A process for obtaining this information and communicating it is essential if the court is to make informed decisions regarding the welfare of the child (Taylor & Siegfried, 2005).

Several comprehensive tools developed within the NCTSN are available to guide the process of taking a trauma history that can be provided to the court. One tool is the Core Clinical Characteristics form, developed by the Network in 2004. Categories for gathering historical data include Demographic Information, Demographic Environment, Academic and Medical Histories, Trauma Information, Indicators of Severity of Problems, and Use of Other Services. This form is complex and may require over an hour to complete with the client and caretaker. While it may not be practical for all agencies to use this instrument, it provides a clear example of the categories in which information should be gathered. The Core Clinical Characteristics form is available for reference on the NCTSN website, www.NCTSN.org.

A tool that requires much less time to administer is the Trauma Profile Tool, which was developed within the NCTSN and will be available on the NCTSN website. This instrument assists child welfare workers in making decisions about the child's mental health needs, based upon the child's exposure to trauma, the developmental point at which the trauma occurred, the severity of the child's trauma stress reactions and the severity of the child's other behavioral issues and their functioning.

Information on the child's trauma history should be shared with other team members, in addition to the judge. When substitute caretakers, such as foster parents or relatives, receive the information obtained in the trauma history, especially information that highlights the connection between the trauma and the child's current behavior, they can support the child more completely. The behavior of traumatized children can present a challenge in a substitute care setting and may result in the disruption of a placement that might have provided the child with a meaningful and stable relationship within which healing could begin.

In many circumstances, knowledge and understanding of the child's specific trauma history, combined with ongoing support and training, allows the caregiver to become an important participant in a healing milieu for the child. One dilemma that these two systems can address is how children will maintain a connection with their families while in substitute care. A sense of continuity, including a sense of how their past and present are tied together, is essential for children in substitute care. Whenever possible, threads of their previous existence, such as a plan that allows them to attend the same school and to see friends or other relatives, should be woven into their lives in the substitute care setting. At a minimum, children should have pictures of supportive relatives, foster parents or guardians, and locations or events that are significant and familiar to provide them with a sense of continuity. The child welfare and juvenile court systems can ensure that the child has an opportunity to develop a sense of his or her own history.

A complete history of the child's maltreatment and trauma experience may include trauma reminders: places, people, experiences, changes to his or her body that occurred as a result of the trauma, or sensory stimuli that prompt memories of the original trauma. Trauma reminders that might create difficulties for the child include:

- Exposure to rooms similar to those in which the trauma occurred;
- Exposure to sounds or smells that remind the child of the traumatic event;
- Exposure to voices or words connected with the trauma for the child; and
- Exposure to the perpetrator of the trauma.

When the child encounters a trauma reminder, he or she may become flooded with memories of the original event and may experience emotions and thoughts as though the event was occurring again. Trauma triggers, or reminders, are unique to each child and may result in a change in the child's behavior, demeanor, or affect that appears inexplicable to observers. In these situations, the child again experiences feelings such as helplessness, powerlessness, and anxiety. It is important that substitute caretakers are aware of trauma reminders that may trigger changes in the child's behavior and that they develop a plan of action to address these behavioral changes.

Protecting the Child from System-Generated Trauma

Consistency in gathering and sharing information about the child's trauma history is important, especially during the investigation of the traumatic events. Each community should develop a protocol that is a collaboration of law enforcement, child welfare workers, legal advocates, mental and medical health professionals, and the judiciary. The protocol's fundamental goal

should be minimizing the risk of additional trauma to child victims/witnesses. This goal is achieved through a cooperative, multidisciplinary effort to limit the number of interviewers and times the child is questioned, and by treating children with dignity and respect (San Diego Child Victim Witness Protocol, 2000).

The use of trauma-informed methods ensures that the maltreated child receives support and protection during the investigation of the events. The manner in which children are questioned during the investigation phase influences their ability to tell their stories. Interviews should be conducted in a child-friendly environment by a skilled interviewer who conveys warmth and support and uses words compatible with the child's developmental level (Memon, 1998). Multiple interviews conducted by different individuals can create additional stress for the child (Saywitz & Snyder, 1993).

In some circumstances, an extended forensic interview may provide an environment for a child in which he or she can better tell his or her own story. For example, a highly anxious child may need several opportunities to make a clear disclosure. In these situations, the same interviewer should meet with the child during each session. The goal is always to provide support to the child in making his or her disclosure. The National Child Advocacy Center in Huntsville, Alabama, has developed one extended interview model (Carnes, Nelson-Gardell, Wilson, & Orgassa, 2001).

The decision to remove children from the care of their parents or primary caretaker is always a difficult and complex one. The sole act of removing the child from the home can be traumatizing. Once that decision is made, a number of supportive, trauma-informed precautions can be taken to ensure that law enforcement, child welfare staff, attorneys, and others who might encounter the child do not cause additional emotional harm. It is important to recognize that simply removing a child from an abusive or neglectful situation is not sufficient to allow a complete recovery from the trauma. From the actual point of removal, especially when law enforcement is involved, children must be reassured they have done nothing wrong. The court is also in an excellent position to reinforce that the child is not to blame for the family situation. The child's needs, perceptions, and worries must be a priority. A comprehensive, individualized plan to guide the child's recovery from the trauma should be put into operation as soon as possible. The following example illustrates the need for immediate attention to the child's recovery process.

Case Study

Law enforcement and child welfare arrived at the home of 3-year-old Molly to remove her due to substantiated allegations of sexual abuse by her father and her mother's apparent failure to protect. In the process, both parents physically struggled with the police, resulting in them being handcuffed. The police took Molly's father into custody, but allowed her mother to remain in the home. With law enforcement assistance, the child welfare worker took Molly to the children's emergency shelter. The child welfare worker was not able to return to the shelter to see Molly for several days after her placement. This allowed Molly sufficient time to form a scenario in her young mind based upon her own interpretation of events. In her mind, Molly saw her family destroyed. As the police removed her and her father, her distraught mother stayed alone. It was also several weeks before Molly saw her mother. During this period, Molly thought that she would never again see any of her family members.

The intervention process, although necessary, failed to protect Molly emotionally and provide her with the context in which this had occurred. The delay in the child welfare worker visiting Molly allowed her interpretation of this event to solidify in her mind. The immediate availability of trauma-focused mental health services within the shelter or in the community could have made a significant difference in how the events affected Molly on a long-term basis. Instead, these events became her most painful memories and the presenting trauma of sexual abuse was no longer the most difficult one for her. Molly needed time in therapy to process the events surrounding the police and child welfare intervention at her home before she was ready to address the sexual abuse.

Molly's experience illustrates the importance of learning how a child enters the child welfare system, how the investigation process affects her, and how quickly, if at all, trauma-focused therapy services are provided. The child must receive accurate information on the status of his or her parents and siblings as promptly as possible. The non-offending parent and the

child should visit as soon as it is safe. When the parent supports and reassures the child, anxiety decreases and the chances of a full recovery increase. Parents should be told that the child's chances for a full recovery increase when she perceives that her parents and other individuals such as law enforcement, child welfare, and judicial personnel believe and support her. The juvenile court and child welfare workers are in an excellent position to prompt parents to convey this message to their child.

Mental Health Services

It is essential that traumatized children who enter the child welfare system are appropriately screened and evaluated in order to understand their functioning and determine the need for therapy services. A consistent method for accomplishing this task should be developed and utilized with each child. With appropriate training, child welfare staff may complete a screening using an instrument such as the Trauma Profile Tool. The use of such an instrument will allow child welfare workers to determine the urgency in referring a child to appropriate mental health services. When the need for mental health services is demonstrated, children should be engaged in the therapy process as quickly as possible after their disclosure of a traumatic event. While some children do not demonstrate symptoms following an episode of maltreatment or trauma, the possibility that symptoms may develop later should be considered. The majority of children who have trauma histories will benefit from appropriate therapy services.

Once the child has engaged with a mental health provider, a more detailed evaluation of his or her functioning should be completed. Using standardized assessment tools at the entry point into treatment assists in the gathering of valuable information on the child's baseline level of functioning. With knowledge of evidence-based treatments and an understanding of the child's trauma history, the court can order appropriate evidence-based therapy for the child. Provision of these services will conserve the limited supply of financial resources for the treatment of children in the child welfare system.

The field of mental health care for traumatized children has had significant growth in the past five to ten years. A statement approved as policy by the American Psychological Association (APA) Council of Representatives during its August 2005 meeting describes evidence-based practice as follows: "Evidence-based practice in psychology is the integration of the best available research with clinical expertise in the context of patient characteristics, culture, and preferences" (APA, 2005). Among the evidence-based practices that have shown promise include parent-child interaction therapy, trauma-focused cognitive behavioral therapy, and abuse-focused cognitive behavioral therapy (Chadwick Center for Children and Families, 2004). In addition, in order to offer the child the optimal level of care, the caretaker must be involved in the child's mental health services. In the absence of a caregiver who is able or willing to participate in the child's therapy, any person who will be a constant presence in the child's life can and should be involved.

When the court has ordered that child maltreatment victims receive mental health services, it should also require regular, clear, and specific documentation of progress in therapy. A comparison of the baseline and follow-up assessments should be included in every report to the court. The Chadwick Center for Children and Families has developed a Trauma Assessment Pathway (TAP). TAP describes a process for measuring progress in treatment using standardized assessment tools and assists the clinician in selecting the most efficacious treatment intervention based upon the child's outcome scores and individualized client profile. This tool is available online at www.chadwickcenter.org.

A system should be in place to allow child welfare workers and judges to select providers in the community who have completed training programs in evidence-based practices, including the required level of supervision to implement these practices independently. In San Diego County, California, an administrative body called the Treatment and Evaluation Resources Management (TERM) manages all clinicians who perform therapy services for or evaluate children in the child welfare system. Only approved clinicians may treat children in the care of the child welfare system. In order to become a TERM provider, a clinician must complete a detailed application that requires documentation of training and experience in treating various categories of childhood trauma and child development. For example, a therapist may qualify to treat preschool children who were exposed to domestic violence and were sexually abused, but not qualify to treat physically abused preschoolers.

Alternatively, a therapist may qualify to treat sexually abused adolescents engaged in self-injurious behaviors, but not latency-age sexual abuse victims. Documentation of ongoing training in areas such as cultural competence and treating co-morbid, or co-existing, conditions is also required. Special care is also necessary in identifying providers who are able to evaluate and treat adult perpetrators of child neglect and abuse.

The Child in the Courtroom

Generally, every effort is made to avoid having children testify in juvenile court matters. Judges, attorneys, social workers, and parents all play a role in whether or not children testify. However, there are times when children are eager to tell their story and perceive testifying as an opportunity to share their thoughts and wishes. When it is necessary for a child to testify, many efforts should be made to assuage fears and provide the tools necessary for the child to be a competent, confident, and empowered witness. Saywitz and Nathanson (1993) found that if the courtroom produces anxiety in the child, performance may be impaired when compared to performance in a more familiar, informal setting. To that end, the child can be supported with psycho-educational programs before even reaching the court and by a judge's sensitive handling of the child witness.

Psycho-educational programs that introduce children to the court before the day they testify offer neutral support to the child. For example, in San Diego, children can attend either a private session or a formal Kids and Teens in Court (KTIC) program, offered by the Chadwick Center at San Diego Children's Hospital. Funded by the California Office of Emergency Services, the program operates free of charge to all child victims and witnesses. A Master's Level social worker administers the KTIC program in conjunction with the Superior Court of San Diego and with support from the San Diego County Public Defender's Office (the entity that represents children in child welfare cases in San Diego County). The KTIC session occurs in an actual courtroom at the juvenile court. Preparing the child for court includes an orientation, a tour of a courtroom, and introduction to court staff.

The KTIC program builds upon the premise that children do better as witnesses when they are prepared for the experience and when their caretakers are able to support them through the process. The program utilizes evidence-informed practices such as desensitization, behavioral rehearsal, and psycho-education to increase the child's ability to testify with as little anxiety as possible. Details of the child's case are not discussed in order to avoid the appearance that the child's testimony is contaminated.

Children learn that through their testimony they have a chance to tell the judge what they want to happen in their family. Children are reminded that the goals of the systems involved in their lives are to ensure they are happy, healthy, and safe. Often, children who have been removed from their homes feel as if their needs are not being taken into consideration. They also have conflicting emotions about why they have been removed and why they have to come to court. Their fears are compounded by having to talk about their family in such a formal setting. During a KTIC session, children learn that they may have the option to testify in the judge's chambers.

By rehearsing behavioral components of the program, children are better able to understand the formal court processes. They do not need to worry about where they should stand, when they should hold up their hand, or what they should say. This psycho-educational process enables children to focus on their job as a witness, which is to tell their story to the judge and to tell only the truth. An introduction of the "players" is helpful. By introducing the court staff, attorneys, and social workers, the children feel as though they are part of the process. By teaching and instructing children and teens that it is "O.K." to say, "I don't know" they again gain a sense of control. The same is true for questions children and teens do not understand. Many children and teens feel uncomfortable questioning an authority figure; encouraging them to say, "I don't understand your question," helps them to reframe the situation. In addition, the child learns about the court process, for example what to do when an attorney says, "Objection." This is an excellent opportunity for the children to learn not only about the judge's role but also about the law.

A sensitive judge can also make it easier and more comfortable for a child to testify. Even though this role may be atypical for a judge, who does not want to appear to be advocating for the child, creating a comfortable environment for the child is not only an appropriate judicial role, it is mandated in many state statutes. (See, for

example, California Penal Code section 288(d); California Evidence Code section 765). Judges play a significant role in whether or not court is empowering or traumatizing. Additionally, the judge may make the court experience developmentally appropriate in the following ways:

1. **Building rapport by asking preliminary questions at the onset of the hearing.** By asking the child some simple, preliminary questions, the judge can elicit a narrative from the child to get him or her comfortable speaking in public. A helpful, rapport-building question to ask the child is: "Tell me about things you like to do for fun." A follow-up question might be "Tell me more." This sequence accomplishes two goals: It puts testifying children at ease and teaches them they may be asked to clarify or give more details while being questioned.
2. **Giving the children specific and concrete instructions.** These instructions must be simple, given one at a time, and given with appropriate feedback in order to be effective. Although judges often explain to children that they may say they "don't know" the answer or that they "don't understand" a question, the instructions can be confusing even to adults. Each instruction should include an illustration in which the child practices giving an answer.[1]
3. **Explaining to the child that the most important rule is to tell the truth and that it is okay to change an answer or to correct a mistake.** Research indicates children are often reluctant to correct themselves or people in positions of authority if they make a mistake. They are concerned that they will be accused of lying or will get in trouble if they make a mistake (Saywitz, 2002). Judges and other adults who help orient the child to the court process should explain that sometimes we make mistakes; we all say the wrong thing at some time or another. Children and teens need to understand they can correct themselves or the attorneys on the stand. As a practice illustration, a judge can say to a 9-year-old girl, "You're 30 years old, right?" The obvious and easy answer is, "No, you're wrong, I'm 9." By making the rules about court concrete and simple, children again can feel a sense of mastery as it relates to testimony.
4. **Creating a child-friendly environment in the courtroom or chambers.** It is particularly helpful if arrangements can be made for the child to see the courtroom in advance. Many children comment on how different the courtroom looks than they expected. Some judges also have a smaller chair in chambers for the child to sit in when testifying. Other items judges use in their chambers include family photos and pictures of interest to children.
5. **Introducing all the players.** Children and teens often have concerns about who will be in court and why each person is there. By introducing the players, the judge can create a warmer environment that is more conducive to disclosing difficult family issues.
6. **Assuring children and teens that the hearing is nothing like the court they may have seen on television or in the media.** Children and teens need to understand the attorneys will not yell at them or each other. The judge can assure children that he or she does not allow this type of conduct in the courtroom. This makes the children feel safer and more in control.
7. **Using a child-friendly competency exam and oath.** Asking a child to swear often elicits a response that he does not swear! Using words such as "promise" and "will" instead of "swear" or "oath" are examples of how the court considers the child's developmental and cognitive needs. Many courtroom clerks have separate admonitions printed for children and adults. Even the commonly used, "Do you promise to tell the truth?" can be confusing to a young child. The concept of promising something in the future can have a different meaning to young children than it does to an adult (Sas, 2002). Some experts suggest asking a young child, "Will you tell the truth?" and then, if necessary, "Do you promise?" (Lyon, 2005). Further, Talwar and colleagues found that questioning children about their understanding of lying and truth-telling does not have any bearing on the truthfulness of their subsequent testimony (Talwar, Lee, Bala & Lindsay, 2002). Asking children to promise to tell the truth, however, has some real value.

Preparation for court can offer a child an opportunity to increase his or her sense of control while in the courtroom and reduce the stress normally experienced when faced with the formidable task of testifying. Within a court education program, the child is able to experience the support of a number of caring adults who consistently believe and support him or her. These positive experiences can transfer into other areas of the child's life and integrate into the larger process of recovering from the trauma. The best possible outcome for a trau-

[1] The following excerpt was taken from a trial with a 5-year-old witness: "THE COURT: Okay, if you don't know the answer to the question just say you don't know…Just tell her you don't know. THE WITNESS: I don't know." (Lyon, 2005).

matized child is to emerge from the experience with the belief that he or she can overcome adverse events. Multidisciplinary teams are able to reduce system-induced stress and therefore better support the child and family on the road to recovery.

Summary

Staffs working within the child welfare and juvenile court systems play a significant role in protecting children from additional trauma and promoting their recovery from the effects of maltreatment and trauma. There are also opportunities for judges to influence the wider system of care for children involved in these two systems. Judges can make positive contributions by:

- Developing an understanding of the effects of trauma on children and remaining current on the literature. An excellent website for accomplishing this is www.NCTSN.org.
- Ordering that a thorough history of the child's maltreatment and traumatic experiences be obtained and communicated to the court and foster parents or relative caretakers.
- Reducing the number of times the child is required to tell his or her story by requiring regular communication among all parties.
- Ensuring that all parties responsible for the well-being of the child act in accordance with one comprehensive plan. The plan should be developed based upon the child's history and include evidence-based methods for promoting his or her recovery from the trauma.
- Ordering mental health treatment for the child with providers who have been able to demonstrate their knowledge and experience in using treatment methods that are evidence based. A process for determining which providers in a community have such expertise or are willing to learn evidence-based practices would be a contribution to local resources.
- Requesting regular and detailed information on the child's progress in treatment. This should include a comparison of baseline assessment scores obtained at the time the child enters treatment with those obtained from regularly scheduled follow-up assessments. If community providers are not yet using standardized assessment tools in the treatment process, judges can introduce the expectation by asking how the provider measures progress in treatment.
- Supporting children as they testify in court by encouraging the creation of a court education program that acknowledges children's developmental needs and recognizes the impact on a traumatized child of testifying in court.
- Initiating the development of a community protocol that can reduce the risk of the child welfare and court systems creating additional trauma for child victims.

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Trauma Interventions and Systems Change in Rural Areas: The Role of the Juvenile Court Judge in Collaboration with Mental Health Professionals

BY JUDGE THOMAS KLIEBERT, JOY D. OSOFSKY, HOWARD J. OSOFSKY, RICHARD N. COSTA, PATRICK DRENNAN, PATRICIA MORSE, AND EDWARD MORSE

ABSTRACT

This article will focus on the evolution of the collaborative work of the Louisiana Rural Trauma Services Center (LRTSC), a Center within the National Child Traumatic Stress Network, and the 23rd Judicial District, a jurisdiction in south Louisiana serving three rural parishes. We will describe how the collaboration and joint efforts, and the changes that have been made in terms of availability of evaluation and treatment resources, seem to be influencing both the educational and judicial systems in St. James Parish and potential sustainability of some of the identified resources. The article will examine how the court and the LRTSC work together with emphasis on the evaluation, reporting and recommendation processes, outcomes and benefits to date, and challenges for the future.

INTRODUCTION

"There is a myth that rural America is somehow Mayberry, Andy Griffith land; that everything is cool and safe and wonderful, when in fact it is not," according to Janice Probst, director of the Rural Health Research Center in South Carolina (Moore, 2005, p. 33). Data from Rural Health Research Center surveys indicate that rural adolescents are equally or more likely than both urban and suburban adolescents to be exposed to violence and drug activities. Data collected on 15 different measures of violence exposure examined in the Human Resources and Services Administration-funded Violence and Rural Teens Project demonstrate that there is no statistically significant lower prevalence of these indicators for rural youths. Similar to factors leading to risk in urban areas, rates of juvenile violence are higher in rural communities with more risk factors that include a large percentage of children living in single-parent households, a high rate of population turnover, and significant ethnic diversity (Osgood & Chambers, 2000). Mink, Moore, Johnson, Probst, and Martin (2005) reported that rural teens are significantly more likely than their urban and suburban counterparts to carry a weapon. Similarly, there is no rural-urban difference in the proportion of arrested juveniles who are sent to juvenile court; in

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2003, this proportion was similar in cities (70%) and in rural areas (71%) (Snyder, 2005).

Rural communities have many strengths, including a greater sense of cohesiveness and community than is often found in urban centers. In rural communities, schools can play even a more central role than in larger cities as a resource for students and families. Yet, rural schools are less likely to have support resources available for students, such as counseling or opportunities for mental health evaluation and services (Mink et al., 2005). Often there is a limited number of school mental health support staff, and few have training in violence prevention policies and practices or the skills necessary for work with traumatized youths. While the recognition of mental health problems in many settings may lead to stigmatization, in rural communities these problems also are often not perceived by school administrators as serious. Available national data indicate that there is a high level of exposure to violence and drug use in rural areas and a scarcity of school-based services aimed at responding to these issues. Youths whose behavioral and mental health problems contribute to their truancy and delinquency have few services available to them. This lack of services may lead to spiraling consequences as a result of the limited prevention and lack of early intervention initiatives available to rural youths.

This article will focus on the evolution of the collaborative work of the LRTSC with the 23rd Judicial District in St. James Parish, Louisiana. Judge Thomas Kliebert serves the entire 23rd Judicial District, which is comprised of Ascension, Assumption, and St. James Parishes. This article focuses only on the work in St. James Parish because the LRTSC is not currently working in the remainder of the district.

Louisiana Rural Trauma Services Center

The LRTSC was established in 2003 as a Center within the National Child Traumatic Stress Network, funded by the Substance Abuse Mental Health Services Administration. The LRTSC was designed to establish collaborations in three rural parishes in Louisiana to: (1) Provide evaluation and mental health services by child psychiatrists, psychologists, and social workers for school-age children and adolescents exposed to trauma; (2) Identify through local networking available resources and increased availability to services; and (3) Build capacity within these parishes and other underserved areas of the state. Through partnerships and collaborations, the LRTSC is working to expand and improve mental health services for rural children and adolescents.

More than 27% of Louisiana's population is rural and 30% of Louisiana's children live in poverty (U.S. Census Bureau, 2000). Louisiana ranks second highest in the country for child deaths, and fourth highest in adolescent deaths attributed to accidents, homicide, or suicide (Kids Count, 2004). Despite the state's efforts within the educational system related to prevention activities and early intervention, 164,212 of the 731,351 students in Louisiana's public school system were suspended and 7,490 were expelled during the 2004 academic year (Louisiana State Education Progress Report 2003-2004, 2005).

The initial focus of the LRTSC was on two sources of entry for children and adolescents into the treatment and services system—a public-private partnership for school districts that meets the educational needs of rural children and hospital emergency services for traumatized youths.

Development of Court and LRTSC Collaboration

As in many rural areas, the judge in the 23rd Judicial District hears both adult and juvenile cases and has jurisdiction in criminal, civil, family, and juvenile cases. The judge hears juvenile and truancy cases in the parish for a full day once a month and on other days as needed. Although there is limited literature related to the rural judiciary, what is available suggests that rural judges are more likely than judges in urban areas to have key community roles resulting in their being more active in initiating services (Provorse & Sarata, 1989). Judges in rural jurisdictions may, by necessity, assume additional roles because of limitations and fragmentation in available services.

As the consultation and treatment components of LRTSC were established and effectively developed in three schools in St. James Parish, and as additional networks and better communication were facilitated, it became increasingly apparent to the court personnel (including the judge, attorneys, Families in Need of Services [FINS] personnel, and the sheriff), that better links between the

juvenile court and the schools were needed to support prevention and intervention activities within the region. The specific opportunities for collaboration between courts and schools evolved in several different areas.

First, the judge established a truancy court to take place when he heard juvenile cases each month, and this provided a logical link to the schools. In collaboration with the St. James Parish School Board, the judge made recommendations for implementation of a stricter and more detailed truancy policy than had previously been in effect. Prior to a child's judicial hearing, the LRTSC clinicians gave the judge insight into the root cause of the family issues contributing to the truancy. Second, it became clear that some students were having disciplinary and related problems in school such that juvenile court interventions were indeed necessary. Third, the judge hearing truancy and delinquency cases noted that these were dependent youths who were acting out; they often came from families with drug-related problems, had histories of parental neglect, or were otherwise involved in dependency cases. The judge noted that too many youths seemed to be "falling through the cracks," or were being maintained inadequately in school, and engaging in repeated episodes of truancy and delinquency, which resulted in high rates of recidivism. The judge requested innovative, collaborative efforts with LRTSC to help meet the needs of these youths and their families. The judge and LRTSC together took initial steps toward building an effective collaboration and establishing a process to work together.

Because of the current LRTSC co-director's experience in serving as faculty for judges, she is an effective communicator in both the mental health and legal fields facilitating the translation of legal and psychological jargon. With her extensive training and intervention efforts in juvenile and family courts across the United States, she brings a national perspective to the development of strategies to address rural issues and concerns. Initially, with the judge's permission, mental health professionals from the LRTSC sat in the courtroom and observed while the judge heard juvenile and truancy cases. The LRTSC clinicians noted how closely the judge was working with the court staff, including the FINS officer, school personnel, sheriff's deputies and juvenile officers, lawyers, and others, while also offering an additional perspective on the cases. The FINS program provides pre-delinquency interventions from a social worker to assist the child and family in lieu of court adjudication. With the presence of additional mental health professionals in court, the judge recognized how helpful it would be in his decision-making process to have more information about the children and adolescents and their families who came before the court. He therefore ordered, on a case-by-case basis, that certain youths be evaluated by an LRTSC professional and that these professionals provide a written summary of the evaluation, including mental health recommendations to the court. The judge used school attendance records, disciplinary records, academic records, and his personal observations of the individuals in court to identify those that he felt would benefit from or merited a mental health evaluation. As this process evolved, it became increasingly clear to the judge that the LRTSC evaluations of youths and their families were of great use to him in making more knowledgeable, expeditious, and effective decisions.

The LRTSC noted that their collaborative efforts with the court positively affected outcomes of their clients. Through the judge's engagement of children and adolescents and their families in court and his implementation of the convening authority of the court in the community, mental health treatment compliance rates improved. The judge often mandated patient follow-up and family involvement in the treatment process in ways that were clear to the family and helpful to the youth in court. Because of the rural nature of the area, the collaborating partners (i.e., sheriff's deputies, school personnel, other mental health personnel, child protection [Office of Community Services—OCS]) became more involved with the children and the community.

The LRTSC professionals have also become an integral part of the school environment, resulting in greater availability and utilization of mental health services. Teachers and other school professionals have learned to access the newly available services, and they use these services for children and adolescents when they identify problematic behaviors. Similarly, parents have had much greater involvement in the process than would have been expected based on the experiences of community mental health clinics and agencies. They have expressed appreciation for the school's concerns about their children and the ability to meet with LRTSC professionals working in the schools. By offering evaluations for children and adolescents and their families in juvenile court with subsequent treatment and follow-up, which is frequently offered within the schools, the process of engaging in

mental health services was considerably destigmatized. LRTSC professionals noted that family members, and the youths themselves, generally appeared relieved and grateful for the additional service and treatment options being offered to them and for the opportunity to make personal progress and avoid further legal difficulties.

In addition to the evaluations and services provided by the LRTSC, other parts of the community began to work together more effectively with the judge and LRTSC to meet the needs of these youths. For example, the Superintendent of Schools, with the permission of the St. James Parish School Board, added two full-time social workers to help implement court orders and services. This has improved the collaboration with the court and the follow-up of students in the school system. The social workers are also working in a proactive effort to prevent children from entering the court system. The head of the FINS program actively participates in all of the evaluation meetings and helps in the monitoring of follow-up. The regional director of Mental Health Services and OCS professionals have also become more involved in providing services when necessary.

Case Study

An 8-year-old boy who came with his maternal grandmother before the St. James Juvenile Court due to truancy was referred by the judge to the LRTSC for an evaluation. This referral was made after the grandmother, the child's caretaker, expressed frustration that her frequent attempts to get her grandchild to attend school regularly were unsuccessful. She said that she could not understand why the child adamantly refused to attend school and wished she had the skills to deal with his difficult behavior. The grandmother provided additional family background information indicating that his biological mother transferred custody of the child to the grandmother following validated allegations of neglect related to the mother's longstanding substance abuse history. OCS continued to supervise this child and made numerous, yet unsuccessful, attempts to work with the child's mother to help her comply with her treatment plan for possible future reunification.

The court ordered an LRTSC evaluation, which consisted of caregiver and child interviews and a battery of objective clinical measures and questionnaires. The evaluation revealed a significant history of traumatic life experiences for the child that were adversely impacting his behavioral and emotional functioning at home and his adjustment and academic functioning at school. His history of early maternal neglect, abuse, and abandonment was revealed as well as his earlier inconsistent school attendance. The evaluation described the boy's history of disruptive behavior that included frequent fire setting, cruelty to animals, and food hoarding. He stated he was concerned that no one loved him and he showed indiscriminate attachment to strangers.

A written report of the assessment findings was presented to the judge with specific recommendations for court orders to be implemented by the court, school, caregiver, and other service providers. The collaborative relationships between the judge and the juvenile court staff, LRTSC, OCS, and school personnel allowed for expeditious implementation of the court's and LRTSC recommendations. Representatives from each of these service areas were present and worked collaboratively at subsequent court hearings. As the child's service and treatment needs became known, the judge ordered that the child have an additional academic evaluation and updated Individualized Education Plan (IEP) completed by school personnel. The judge also ordered that the child remain in the care of his grandmother pending further investigation of his mother's home by OCS. The child received ongoing individual and family psychotherapy and psychopharmacology services from a community-based counseling center. The child and grandmother were aided by the sheriff's office in obtaining transportation services to and from his scheduled appointments. The court-appointed attorney assisted the grandmother in applying for Social Security benefits. In addition, the clinician was able to provide the grandmother with parenting education and support to help her better understand her grandchild's behavioral difficulties. He also helped her recognize the importance of initiating and maintaining the psychotherapeutic and pharmacological treatment that her grandchild so desperately needed.

During the clinician's follow-up contact with the child's grandmother, she stated that she was grateful for the support offered by the court, school, and mental health personnel and felt far less overwhelmed with the challenges she faced related to caring for her grandson. Although she still had problems with her grandson's school attendance, she stated that, despite his frequent protests, he attended school regularly and was less anxious since he began receiving additional special education services and individualized tutoring. She recognized

Working in Rural Jurisdictions – Recommendations

1. Build a trusting relationship between the court and mental health professionals. Set up meetings with key people including the judge, superintendent of schools, social workers, child protection agency, sheriff, and other relevant court personnel to talk about concerns and needs of both groups.
2. Have mental health professionals, school personnel, and others who interface with the court attend hearings in juvenile court to learn about the structure and possibilities for collaboration.
3. Mental health professionals need to be available to do evaluations for the court when requested, as well as provide follow-up with questions and needed referrals for services.
4. A written summary of the evaluation needs to be provided in a timely manner for the judge including clear recommendations for the youths.
5. School personnel and others who interface with youths in the community need to reassess the service availability and possibilities for improving services within the school and other settings.
6. Additional meetings need to be held periodically to review the progress of the collaboration.

that the skills she learned through parenting education and family therapy helped her to be more understanding of and patient with her grandchild's difficult behavior; furthermore, she was able to implement structure and household rules which helped improve his behavior and emotional functioning. As a result, she described the child as happier, more loving and outgoing, and doing better in school.

Summary of Collaboration between the LRTSC and the Rural Court

As noted earlier, there has been increased collaboration among the court, the schools, law enforcement, the community agencies, and LRTSC professionals. Evaluations and meetings prior to each court hearing appear to be helpful in facilitating needed services and follow-up for the youths and their families. The availability of better evaluations and treatment plans appears to be having a positive effect on improving outcomes that include improving compliance with court orders and treatment plans, reducing recidivism, and decreasing the frequency of behavioral problems, truancy, school suspensions, and expulsions. There has been an increased appreciation for the crucial role that the judge can play in establishing and implementing the plans necessary to positively impact outcomes for youths in difficulty. In May 2005, FINS sponsored a statewide conference, with involvement by LRTSC professionals as well as a respected juvenile judge from another jurisdiction, for the judiciary, FINS workers, OCS, mental health, and other community professionals to educate and provide further training that will be helpful for other parishes facing similar issues. Outreach is continuing as the LRTSC provides education for local pediatricians and primary care physicians so that they can recognize and become responsive to the needs of traumatized children and adolescents as well as to the recommendations of LRTSC professionals working with the schools and court. An educational forum for rural physicians is planned in late 2006.

Remaining Challenges

The court and the LRTSC still face several challenges in St. James Parish. There is increased urgency to respond to the need for additional services for the troubled youths and their families who appear in juvenile court with difficulties related to their underlying behavioral and emotional disturbances. Depending on the deficiencies in their behavioral and emotional functioning, these individuals would benefit from services ranging from temporary respite services for mild offenders to in-patient residential placement for more severe and/or repeat offenders where intensive psychotherapy and medication management is an integral part of treatment. Although locked juvenile detention facilities are often the first line of defense for detaining juvenile offenders, it is imperative that collaborative relationships between judges and mental health professionals be made as a means of early identification and intervention with this

high-risk population of youths. Rapid response services (including next-day appointment availability) by mental health clinics are needed as well as other follow-up services for high-risk children and adolescents and their families. After-school and weekend services for adolescents, including counseling, tutoring, community services, and recreational and physical activities would be an important prevention and intervention component in these underserved communities. Social skills building for many of the youths who appear in court is needed so that they can function better in school and in the community. Reintegration programs for youths unable to function in school on a full-time basis are also needed.

Finally, through the work of the LRTSC in several rural Louisiana parishes, it has become increasingly clear that there is a great need for similar evaluation, intervention, and treatment services in other parishes to help high-risk youths and prevent more serious problems. In fact, eight parishes have already requested additional help in provision of services; however, the ability to extend services is limited due to lack of financial or professional resources. In addition, because of the trauma experienced by many children and families due to loss and displacement from urban to rural areas following Hurricanes Katrina and Rita, the need for additional interventions, programs, and services in rural Louisiana has grown. Many of the rural schools and courts are now more crowded without additional resources being available to handle the increased needs.

Conclusion

The 23rd Judicial District in St. James Parish and the Louisiana Rural Trauma Services Center have experienced a number of beneficial outcomes and lessons learned that other rural jurisdictions can apply. In order for the juvenile court to function effectively, there was a need to mobilize resources and build capacity to serve the needs of children and families. To address this situation, increased collaboration between the court, school systems, law enforcement, and mental health professionals and identification of other available resources was needed. A rural judge and court staff are often the center of informal communication networks and can be key partners in the provision of services for youths and families. Collaborations, such as the one described in this article, can result in much better communication and cooperation between schools, service providers, clinicians, and the court, with greater involvement by various professionals in providing needed services. It is recognized that transitional services, reintegration, and follow-up services for children and their families are urgently needed. Additional resources in the parish are needed to prevent recidivism and to help high-risk youths achieve their potential as well as to identify and assist in preventing siblings and other family members from entering the court system.

In conclusion, while there are community strengths, limited resources in rural jurisdictions often result in difficulties obtaining adequate evaluation and treatment services for children and adolescents who appear in court. The collaborative efforts of the court and the LRTSC emphasize the importance of identifying and responding to the mental health needs of youths in the juvenile justice system in an effort to address and prevent causes of juvenile crime and delinquency (Wasserman et al., 2003). The experience of the 23rd Judicial District in St. James Parish and the LRTSC has shown that building trust in a relationship among a variety of professionals who care about children and adolescents can make a positive difference. Such models of collaboration have been effective as in this program, to reduce the stigma associated with receiving mental health services. It is hoped that the experience of the collaborative partners in Louisiana's 23rd Judicial District may help other jurisdictions develop programs to better meet the needs of high-risk youths in their communities.

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